# DEPARTMENT OF COMMERCE

Comm 20

# **Chapter Comm 20**

# ADMINISTRATION AND ENFORCEMENT

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# Subchapter I — Purpose and Scope

# Comm 20.01 Purpose.

The purpose of this code is to establish uniform statewide construction standards and inspection procedures for one- and 2-family dwellings and manufactured dwellings in accordance with the requirements of ss. 101.60 and 101.70, Stats.

# <u>Purpose</u>

It should be kept in mind that statewide "uniformity" is a primary objective in the administration and enforcement of the code. To accomplish this objective, it is important that any variations in the regulations be kept at an absolute minimum and that persons given the responsibility to interpret and enforce these regulations perform their duties the same as their fellow workers. Therefore, the UDC is a maximum and minimum code and all inspectors enforcing it must be state-certified. The UDC Program staff at Safety and Buildings Division act as consultants to inspectors and other users of the code to help maintain this uniformity.

Question: What is the Wisconsin Uniform Building Code and its relationship to the

Wisconsin Uniform Dwelling Code?

Answer: The Wisconsin Uniform Building Code (WUBC) was prepared by the Building Inspectors Association of Southeastern Wisconsin. It was quite popular before

Inspectors Association of Southeastern Wisconsin. It was quite popular before the state code, Comm 20-25 (UDC), was enacted in June 1980. Some municipalities still use the WUBC code for outbuildings and pre-1980 dwelling alterations and additions since such construction is not covered by the state UDC. It also covers local administrative procedures and levying of fines which are not covered by the UDC. The WUBC has a chapter numbering system

starting with 30 which helps distinguish it from the UDC, chs. 20-25.

There is also a national model building code called the IRC (International Residential Building Code) that is prevalent in some neighboring states including Minnesota but ot is not enforced in Wisconsin. The IRC and several other One and Two-Family Codes used in many other states are similar to the IRC.

#### Comm 20.02 Scope.

The provisions of chs. Comm 20 to 25 shall apply to the construction and inspection procedures used for all new one- and 2-family dwellings, manufactured buildings for dwellings and newly constructed community-based residential facilities providing care, treatment and services for 3 to 8 unrelated adults.

#### Scope

The emphasis we should make in this paragraph is on the word "new." It is the intent of the code that these regulations <u>not</u> apply to any house constructed prior to the effective date of the regulations. Chapter Comm 22 became effective December 1, 1978 and Chapters Comm 20, 21, 23, 24 and 25 became effective June 1, 1980. Homes built prior to these dates are not subject in any way to the Uniform Dwelling Code as far as the state is concerned. Local regulations may be stricter and retroactively apply the UDC to such homes. The separate state electrical and

plumbing codes also applied before 1980. Separate state smoke detection code, Comm 28, does apply to houses built before 1980.

For complaints about home improvement trade practices or landlord/tenant relations, you may contact:

Wisconsin Dept. Of Agriculture Trade & Consumer Protection

Trade And Consumer Protection Division

801 West Badger Road

P O Box 8911 Madison Wi 53708

1 (800) 422-7128

#### CBRF's or AFH's

**Question:** What constitutes a community-based residential facility (CBRF) or an Adult Family

Home (AFH) versus a rooming house?

Answer: The key is that a CBRF or AFH must have a license issued by the state Department

of Health and Family Services (Tel 608-261-5993). The UDC covers those facilities

constructed since 1980 serving 3 to 8 clients. Staff people are not counted.

(1) MUNICIPAL ORDINANCES. (a) A municipality may not adopt an ordinance on any subject falling within the scope of this code including establishing restrictions on the occupancy of dwellings for any reason other than noncompliance with the provisions of this code as set forth in s. Comm 20.10 (1) (c). This code does not apply to occupancy requirements occurring after the first occupancy for residential purposes following the final inspection required under s. Comm 20.10 (1) (b) 4.

## Municipal Ordinances

This requirement restricts the adoption of local ordinances which would be considered more or less restrictive than the Uniform Dwelling Code. Also refer to subsection Comm 20.06(1).

Note that this section does allow municipalities to enforce occupancy requirements on a UDC dwelling after the first occupancy. This would allow for housing ordinances that require basic maintenance of the structure after the original construction.

As a result of legislation (1991 Act 309) and rulemaking, the scope of the UDC has been expanded to include construction site erosion control. Therefore, municipalities may not enforce other local erosion control ordinances on UDC projects. Note that this only restricts local ordinance application when a UDC building permit is required and then only to on-site requirements. Local prohibitions against tracking on streets or soil deposition on neighboring properties would not be superseded. However, the ordinance could not directly require on-site measures to be taken.

(b) This code shall not be construed to affect local requirements relating to land use, zoning, fire districts, side, front and rear setback requirements, property line requirements or other similar requirements. This code shall not affect the right of municipalities to establish safety regulations for the protection of the public from hazards at the job site.

# Allowable Municipal Ordinances

"Land use" would include regulating such things as constructing a house in a farming or business district.

"Zoning" ordinances are considered to be those which do not affect the design or assembly of a house or its appurtenances. Allowable zoning issues can include minimum dwelling size, exterior finish material, maximum dwelling height, minimum finished grade height and other items relating to the exterior appearance of the dwelling or to community property values.

"Setback" - In addition to requiring minimum distances to lot lines, streets, other buildings, etc. there could be a limitation on not permitting a building wall to have an opening if the wall is within a prescribed distance from the property line. Also there may be requirements for requiring a minimum fire-resistive rating for such a wall. This would be for the purpose of fire protection of adjacent property. An example would be a local requirement for a firewall at the property line of a "zero lot line" duplex.

"Hazards at the job site" means during the period a house is being constructed.

#### Summary of State Contractor Credentialing

The following types of activities require credentialing by the State Division of Safety and Buildings:

- Plumbers
- Automatic fire sprinkler fitters and contractors
- Certified soil testers for private sewage systems
- Structural welders for commercial buildings
- Refrigeration and air conditioning technicians
- Installers and removers of underground and flammable liquid storage tanks.
- Contractors taking out construction permits for one and two family dwellings, regardless of its age. (There is no state licensing of general contractors for commercial buildings.)
- *HVAC* & refrigerant contractors.

In addition, the Division offers voluntary master and journeyman electrician certifications, in lieu of any municipally-required examination, and a voluntary electrical contractor certification. For either the master or contractor certification, municipal license fees may still be charged. Contact us at (608)261-8500 for further information on any of these programs.

- Other state agencies also have licensing programs for trades allied with construction.

   The state Division of Health (608-266-9382) certifies roofing and siding contractors working with asbestos containing materials, as well as for other asbestos related activities. They also certify contractors dealing with lead-based paint removal.
- The Department of Natural Resources (608-266-0162) licenses well drillers and pump installers.
- The Department of Regulation and Licensing (608-266-1397) licenses designers of commercial buildings of over 50,000 cubic feet and land surveyors. If a builder is involved in the sales of spec homes they should contact the real estate licensing program at (608)266-5511 for further information.
- The Department of Regulation and Licensing (608-266-5511) licenses "Home Inspectors" involved in the sales of existing homes (secondary market homes) which may or maynot have been built to the UDC requirements call for further information.

All businesses are obligated to comply with any applicable Worker Compensation requirements (608-266-1340), Unemployment Compensation requirements (608-266-3114), sales, use or withholding taxes (608-266-2776) and corporate registration requirements (608-266-9869).

Does a municipality have the authority to license trades other than plumbers **Ouestion:** 

working on a home under the UDC?

Because of the ambiguity of s. 101.63(2) Stats., the department has taken a "hands Answer:

off" approach to the issue. Municipalities, at their option, will be allowed to

require licensing of the trades, including an owner/occupant.

**Ouestion:** Are contractors subject of any special consumer protection rules?

Answer: The Department of Agriculture, Trade and Consumer Protection does administer

Chapter Ag 110, Wisconsin Administrative Code, which regulates home improvement trade practices (but does not cover construction of new residences). This code does include language regarding prohibited trade practice, building permits, guarantees or warranties, home improvement contract requirements and preservation of buyer's claims and defenses, but not bonding. Also, as above, there

may be local ordinances regarding contractor bonding.

(c) Any municipality may, by ordinance, require permits and fees for any construction, additions, alterations or repairs not within the scope of this code.

# <u>Items Not Within the Scope of the Code</u>

*Municipalities may adopt local ordinances covering the following:* 

"Construction" - Detached buildings such as garages, storage, agricultural buildings, fences, driveways, etc.

"Additions, alterations or repairs" - Additions, alterations and repairs to houses constructed before June 1, 1980. However, additions, alterations or repairs to houses built between December 1, 1978 and June 1, 1980, must comply with ch. Comm 22, Energy Conservation requirements.

(d) Any municipality may, by ordinance, adopt the provisions of chs. Comm 20 to 25 to apply to any additions or alterations to existing dwellings.

# Pre-1980 Dwellings

Municipalities may adopt any code, including the UDC, to apply to homes built before June 1, 1980. In fact, they are encouraged to adopt the UDC for these older homes, especially alterations and additions, so as to simplify enforcement procedures and code understanding by builders and owners. However, any petitions for variances on pre-1980 dwellings would be handled by the local municipality only. Also, state inspector certification would not be necessary to enforce the UDC on older homes.

However, the state Plumbing and Electrical Codes generally do apply to all buildings in the state, regardless of the age. Also, the Smoke Detectors Code, ch. Comm 28, will require older dwellings to have smoke detectors, and the Rental Unit Energy Efficiency Standards Code requires rental residential property to meet energy conservation standards at the time of sale. (See order form at front for informational brochures.)

(2) LEGAL RESPONSIBILITY. The department or the municipality having jurisdiction shall not assume legal responsibility for the design or construction of dwellings.

#### Legal Responsibility

The compliance and penalty sections of the statutes and code first require the owner, designer and builder to conform to the law and the code even if there are no inspections performed. When inspections are performed, the inspector is required by the same statute section to be certified. It is the responsibility of everyone involved to carry his or her respective share of the liability of complying with the laws and regulations. Governing bodies which perform inspections are considered to be in a position of "conflict of interest" if they also perform acts of actual design and physical construction of the inspected work. It is the duty of the governing bodies and inspectors to advise, inspect and cause compliance. It is not their duty to perform design and construction type activities. This is not to say that inspectors and their employing municipalities are exempt from liability in their actions.

(3) RETROACTIVITY. The provisions of this code are not retroactive, except as specified in s. Comm 21.09.

#### <u>Retroactivity</u>

The general rule is that for a regulation to be retroactive, it must be written with a statement that existing conditions must be brought into conformance. As the UDC is revised and updated,

existing homes are not required to be brought up to the new standards. Because of this, it is important that inspectors keep their old code books for use in inspecting existing dwellings.

A dwelling may continue to be built per the code at the time of permit application, despite any code changes that may take place during the period of construction. The permit applicant may submit a revision to the previously approved plans, if he or she desires to be covered by a new code provision.

Repair work, as defined in s. Comm 20.07(61), also does not need to be done according to the new code but rather may be done per the code at original construction. Alterations and additions per ss. Comm 20.07(2) and (4), to homes within the scope of the UDC, must be per the current code. See s. Comm 20.07(61) of the code and this commentary for a discussion on repairs and alterations to UDC homes.

(4) INNOVATIVE DWELLINGS. No part of this code is intended to prohibit or discourage the construction of innovative dwellings such as a dwelling built below ground, a geodesic dome, a concrete house, a fiber-glass house or any other nonconventional structure.

#### *Innovative Dwellings*

The intent of this paragraph is to permit flexibility in the design and construction of houses. It is not the intent of the code to permit unsafe construction or hazardous conditions to occur. Therefore, when a house is designed outside the prescriptive or cookbook methods of this code, the designer must demonstrate to the enforcing authority that the house will perform as required by the code. Engineering performance standards are listed in ss. Comm 20.24, 21.02 and elsewhere.

(5) LANDSCAPING. Except for construction erosion control, the scope of this code does not extend to driveways, sidewalks, landscaping and other similar features not having an impact on the dwelling structure.

#### Landscaping

There will be very few conditions or circumstances under which the landscaping would impact on the dwelling structure. One example would be in determining final grade where it may affect the need for treated sills or rim joist per Comm 21.10. Another example might be a sidewalk, landing, porch, or driveway not properly installed such that it is lifted through frost action to such an extent that a door required as an exit cannot be opened. Further examples would include window wells, used for emergency exits or light wells, also guardrails when there is elevation changes of more than 24" and decks or landings and stairs of more than 24" elevation changes. Also s. Comm 21.12 requires that the grade slope away from the dwelling to provide good drainage and landscaping may be part of erosion control under Comm 21.125.

#### Comm 20.03 Effective date.

The effective date of ch. Comm 22 is December 1, 1978. The effective date of chs. Comm 20, 21, 23, 24 and 25 is June 1, 1980.

#### Effective Date

The effective date of chs. Comm 20, 21, 23, 24 and 25 was June 1, 1980. The effective date of ch. Comm 22 was December 1, 1978. Additionally, there have been various revisions to all chapters of the code since the original effective dates. Check the "History Notes" at the end of each code section for effective dates of revisions. (See the Introduction page of the UDC for an explanation of these history notes.) For purposes of determining what date a dwelling has begun "construction," use the date of <u>permit application</u>. In the case of a manufactured dwelling, the date that its construction started determines the applicable code edition.

# Comm 20.04 Applications.

- (1) (a) NEW DWELLINGS. This code applies to all dwellings, dwelling units and foundations for dwelling units, for which the building permit application was made or construction commenced on or after the effective date of this code.
  - (b) All dwellings covered under par. (a) shall meet the requirements of ch. Comm 21.
- (c) 1. The installation of heating, air conditioning, plumbing or electrical systems is not required.
- 2. If any of the systems under subd. 1. are installed, the systems and their installation shall comply with this code.
- 3. If a heating or air conditioning system is installed, the dwelling shall comply with ch. Comm 22.

# **Applications**

Note that additions and alterations, as defined in ss. Comm 20.07(2) and (4), to dwellings that were originally covered by the UDC are subject to the edition of the code at the time the permit for the new work is applied for. Additions and alterations also require permit application as required by local ordinance, but <u>not</u> new permit seals.

- (2) ADDITIONS OR ALTERATIONS. Additions or alterations to dwellings covered by this code shall comply with all provisions of this code, including the soil erosion provisions, at the time of permit application for addition or alteration.
- (3) BED AND BREAKFAST ESTABLISHMENTS. The following portions of a bed and breakfast establishment shall comply with the provisions of this code:

- (a) The third floor when used for other than storage.
- (b) A structural addition, for which no use other than as a bed and breakfast establishment is proposed.

Note: See s. 254.61, Stats., for further conditions and limitations relating to bed and breakfast establishments.

#### Bed and Breakfast Establishments

Section 254.61, Stats., defines a bed and breakfast such that it:

- "(a) Provides 8 or fewer rooms for rent to no more than a total of 20 tourists or transients;
- (b) Provides no meals other than breakfast and provides the breakfast only to renters of the place;
- (c) Is the owner's personal residence;
- (d) Is occupied by the owner at the time of rental;
- (e) Was originally built and occupied as a single-family residence, or, prior to use as a place of lodging, was converted to use and occupied as a single-family residence; and
- (f) Has had completed, before May 11, 1990, any structural additions to the dimensions of the original structure, including by renovation, except that this limit does not apply to any of the following:
- 1. A structural addition, including a renovation, made to a structure after May 11, 1990, within the dimensions of the original structure.
- 2. A structural addition, made to a structure that was originally constructed at least 50 years before an initial or renewal application for a permit under s. 254.64 (1) (b) is made and for which no use other than as a bed and breakfast establishment is proposed. The structural addition under this subdivision shall comply with the rules under s. 101.63 (1) and (1m)."

This section applies to both pre- and post-1980 built dwellings. However, it should be noted that this same statutory section only allows structures completed prior to May 11, 1990, to be licensed as a bed and breakfast establishment. It also states other eligibility standards. In any case, such an establishment must be licensed by the State Division of Health and Family Services. (Tel. 608-266-1120)

Bed and Breakfast esabilshments must comply with all of the provisions listed above - (a) through (f). Those establishments that do not meet all of those provisions would need to comply with the Commercial Building Code. Examples of non-conformance with the bed and breakfast establishment provisions which would put the building into the category of Commercial Building would be; a home built after May 11, 1990, serving more than just breakfast, serving breakfast to other than the tenants, owner does not occupy the residence at time of rental. As with the bed and breakfast establishment this Commercial establishment that rents out rooms to tourists or transients and serves food must be licensed by the State Division of Health and Family Services. Types of licensing assigned to this Commercial building by H&FS might be bed and breakfast establishment, tourist rooming house, hotel/motel or restaurant.

(4) CHANGE OF USE. A building previously used for another purpose, such as a barn or garage, shall comply with this code upon conversion to residential use.

## Comm 20.05 Exemptions.

(1) EXISTING DWELLINGS. The provisions of this code shall not apply to dwellings and dwelling units, the construction of which was commenced prior to the effective date of this code, or to additions or alterations to such dwellings.

Note: The provisions of chs. Comm 20 to 25 may be adopted by a municipality to apply to any additions or alterations to existing dwellings.

#### Existing Dwellings

In the case of a burned or collapsed pre-existing dwelling, a substantial portion of the dwelling, such as a basement, must remain in order for a reconstructed dwelling to be exempted from the UDC. Local regulations may be stricter by the use of the raze and remove procedures of state statute s. 66.0413.

It needs to be emphasized that only pre-existing dwellings and dwelling units are exempted. Buildings previously used for other purposes and converted to a dwelling are subject to the UDC upon conversion to residential use.

Also, the use of used lumber and other materials from an old dwelling in a new dwelling does not exempt it from the UDC.

(2) MULTIFAMILY DWELLINGS. The provisions of this code shall not apply to residences occupied by 3 or more families living independently or occupied by 2 such families and used also for business purposes.

# Multi-Family Dwellings and Commercial Occupancies

The Wisconsin Commercial Building Code, chs. Comm 61 through 65, are the rules that apply to three- or more unit residential buildings as well as to commercial buildings that are places of employment and publicly-accessed buildings built after October 9, 1914. (There is an exemption for farming operations.) It also applies to dwelling or sleeping units that are in a building with commercial use in which the total combined number of commercial and residential tenant spaces is three or more. (The Existing Building Code, chs. Comm 75-79 applies to commercial buildings built prior to this date.)

The Commercial Building Code also applies to a situation in which three or more rowhouses are connected together with construction, whether or not there is a property line, fire wall or both separating the units.

The following residential units are subject to the Commercial Building Code:

- 2 or more apartments or rooming occupancy bedrooms in a building also used for commercial purposes 1 or more apartments in a building also used by two or more commercial tenants
- 3 or more apartments or rooming occupancy bedrooms in a building

(A rooming occupancy is one in which bathing and cooking facilities may or may not be shared but sleeping rooms are separately leased and secured from each other.)

The Uniform Dwelling Code does apply to a single dwelling unit or sleeping room constructed after June 1, 1980, in combination with a single business tenant, while the applicable parts of chs. Comm 61-65 apply to the business portion of the building. (In general, the UDC applies to both non-transient and transient residential usages.) The residential portion would need to be considered in the overall building area for Commercial Building Code compliance, unless it was separated by a firewall.

Home-based businesses such as professional offices, beauty shops, car repair, etc., are generally within the scope of the Commercial Building Code even if the business is located within the dwelling proper. However, there are several exceptions:

- If there are no employes and the public does not enter for business purposes, OR
- If the activity meets the definition of home occupation of s. Comm 61.02(3)(h) & (4):
  - maximum of 1 nonfamily employe,
  - maximum 25 percent of the habitable floor area used,
  - no explosives, fireworks or motor vehicle repair.

Note that per state statute s. 101.12(3)(h), municipalities are prohibited from issuing local permits or licenses for construction or use of public buildings or places of employment until the Department of Commerce has approved plans for such buildings, unless otherwise exempted from plan review. For a summary of plan submittal requirements, request a copy of our Commercial Plan Review brochure with the publications order form at the front of this commentary.

(3) REPAIRS. The provisions of this code do not apply to repairs or maintenance to dwellings or dwelling units, or to the repair of electrical, plumbing, heating, ventilating, air conditioning and other systems installed therein.

#### **Repairs**

The intent of this section is to exempt repairs from plan submittal, permit application and inspection requirements only. It does not exempt repairs from having to be preformed according to the code that was in effect at the time of original construction. s. Comm 20.07(61) of the code and this commentary for a discussion of what constitutes a repair versus an alteration, the latter would require permit application. Note that s. 20.02(1)(c) allows municipalities to have more restrictive permitting requierments.

(4) MOVING OF DWELLINGS. The status of a dwelling, new or existing, shall not be affected by the moving of the dwelling.

Question: A home that was built in 1939 is relocated to a new lot and installed on a new

poured-in-place concrete foundation and basement. The home has interior doors that are 2'-6" wide and the stairway to the basement is 2'-8". Will the owner or contractor have to correct both of these Code violations before occupancy of the

home can take place?

Answer: Unless the municipality has either an ordinance or a building code that was in

effect prior to 1980 **and** these items were violations of that code, at the time of construction, the fact that the home is relocated and now placed on a new

foundation the UDC does not apply.

(5) ACCESSORY BUILDINGS. With the exception of s. Comm 21.08 (1), the provisions of this code do not apply to detached garages or to any accessory buildings detached from the dwelling.

#### Accessory Buildings

An open breezeway with a roof attachment between a house and a garage would create one building and cause the garage to be within the scope of the code even if it is located more then 10'-0" away from the dwelling and has open side-wall construction.

An outdoor pool is not subject to the UDC except for any electrical equipment located in the dwelling. Also, the electrical code independently governs any outside wiring. The Plumbing Code would also apply if there were any water or waste piping connecting the pool to the house.

# Accessory Buildings - Decks

**Question**: Are decks considered accessory buildings?

**Answer**: No, not iIf the deck serves as an exit path from the dwelling, then it is covered by the UDC. The following code sections typically apply, although not exclusively:

- 21.16 If the deck is attached to a building, the post holes (footings) must be 48 inches below finished grade.
- 21.10 Any lumber within 8 inches of the earth must be pressure treated.
- 21.04 Stairs, treads and risers. Stair width must be at least 36 inches. Risers shall not exceed 8 inches in height, measured vertically from tread to tread. Treads shall be at least 9 inches wide, measured horizontally from nosing to nosing. There shall be no variation in uniformity exceeding 3/16-inch in the depth of the tread or in the height of the risers.

- 21.04 (2) (a) 1. HANDRAILS: Every stairway of more than three risers shall be provided with at least one handrail. Handrails shall be provided on all open sides of stairways. Handrails shall be located at least 30 inches, but not more than 38 inches, above the tread nosing.
- 21.04 (2) (b) 2. GUARDRAILS: Decks that are more than 24 inches above grade shall be protected by guardrails. Guardrails shall be at least 36 inches above the upper surface of the floor. Open guardrails or handrails shall be provided with intermediate rails or an ornamental pattern to prevent passage of a sphere larger than 6 inches. Handrails and guardrails shall be designed and constructed to withstand a 200 pound load applied in any direction.
- 21.045 Ramps to decks must comply with this section.
- 21.04 (3) (c) Doors at landing.
- 21.02 Floor structural capacity 40 psf, live load.
- 21.18 (4) Wood foundation (poles) "FDN" treated (.45 CCA) or (.60 CCA).
- If the deck is free standing, not attached to the dwelling <u>not</u> serving as an exit path from the dwelling, then it may be treated as an accessory building.
- (6) DETACHED DECKS. The provisions of this code do not apply to detached decks provided the deck does not serve an exit from the dwelling.
- (7) FARM BUILDINGS. The provisions of this code do not apply to the buildings used exclusively for farm operations.

# Farm Buildings

This code does not exclude a house located on a farm or the dwelling unit attached to an agricultural building.

- (8) INDIAN RESERVATIONS. The provisions of this code do not apply to dwellings located on Indian reservation land held in trust by the United States.
- (9) RECREATIONAL VEHICLES AND MANUFACTURED OR MOBILE HOMES. The provisions of this code apply only to onsite installation or construction of an addition or alteration to a recreational vehicle or manufactured or mobile home, such as a stoop, deck, porch

or exterior stairs, provided the recreational vehicle or manufactured or mobile home was produced after June 1, 1980.

Note: Chapter Comm 27 applies to the installation of piers if the manufacturer does not specify the pier requirements.

#### Manufactured Home Foundations

Chapter Comm 27 sets minimum pier installation requirements for mobile or manufactured homes. If a home does not rest on its frame and wheels, then it shall as a minimum be supported by piers that meet these requirements. Ch. Comm 27 is a minimum code, so municipalities may have additional requirements for manufactured homes that are supported by piers, including wind tiedowns, skirting, etc. Municipalities may also require pier installation, rather than support by the wheels only.

Per s. Comm 20.04, permanent, on-site additions to mobile homes are subject to the Wisconsin Uniform Dwelling Code (UDC), Chs. Comm 20-25. The Division of Safety & Buildings applies the UDC foundation requirements to mobile homes that have basements or crawl spaces that have unbalanced fill (a difference in soil height between the inside and outside). The UDC has performance requirements for foundations so that masonry, concrete and permanent wood foundations are all acceptable for basements and crawl spaces. Because the UDC is a uniform code by statute, municipalities may not be any more or less restrictive than the UDC when regulating crawl spaces or basements that support manufactured dwellings or site-built homes.

However, per s. Comm 20.02(1)(b), a municipality may apply zoning ordinances to UDC dwellings, as well as manufactured homes. Such ordinances could regulate exterior appearance, size, setbacks, sidewalks, driveways and similar topics. Our agency is aware of municipalities that have had their ordinances challenged by private parties if they single out manufactured homes with such ordinances.

As usual, the municipality needs to have a properly adopted ordinance in order to enforce Chs. Comm 20-25 or 27 or any other local regulations.

#### Mobile Homes vs. Modular Homes

Mobile homes have been required to follow construction standards, including heating, electrical and plumbing, since 1976 through a Federal Housing and Urban Development (HUD) program. In Wisconsin this is administered under contract by the Division of Safety and Buildings. The current proper and legal term for mobile homes is manufactured homes. While the manufactured home itself is not covered by the UDC, any and all site-built additions to that home, such as a basement, crawl space or room addition, decks, stairs, or landings attached to the home, do have to be constructed to meet the requirements of the UDC if the manufactured home was built after June 1, 1980.

While manufactured homes are constructed to the HUD construction standards, manufactured dwellings must meet the UDC standards. We commonly refer to these non-HUD factory-built homes as manufactured dwellings. What is confusing to many is that double-wide manufactured homes often are similar in appearance to modular homes. For purposes of identification, a manufactured (mobile) home is identified with a red metal rectangular label affixed to the rear of each full or half unit. This indicates the home has been constructed in accordance with the HUD manufactured home standards. On the other hand, a modular home or manufactured dwelling will be identified with a red plastic sticker, called a "Wisconsin Insignia," imprinted with the outline of the State of Wisconsin. It will usually be affixed to the electrical panel, vanity base cabinet or kitchen cabinet. Therefore, inspectors must first identify what they are looking at before applying the applicable code regulations.

A current list of approved Dwelling Manufacturers can be found in s. 20.13 of this commentary. Note that several of these also have mobile (manufactured) home lines.

If you have problems or questions regarding manufactured (mobile) homes, you may contact HUD's contracted Wisconsin coordinator at (608) 576-6224 in the Division of Safety and Buildings.

# Subchapter II — Jurisdiction

## Procedure for Municipalities Exercising Jurisdiction

Note that as a result of statutory changes in December 2003, the code will be revised in 2004 to require enforcement of the UDC by the state in any municipality that does not have local enforcement. This will be done by delegated inspection agnecy. See our webiste for details.

Subchapter II of ch. 20 sets out the procedure by which governmental jurisdiction is accomplished. It is intended in both the law and code that state government has a minimum of involvement when local governing bodies take on the Uniform Dwelling Code as a set of local regulations. That is why local government is provided the authority to set fees, remedies, and penalties and to carry out joint enforcement efforts with other municipalities.

The prime intent of state government involvement under these circumstances is to maintain "uniformity" in the writing, adopting, interpreting, application and enforcement of the rules.

In the interest of uniformity on a statewide basis, the adoption of additional regulations relating to a subject within the scope of the Uniform Dwelling Code is not permitted at the local government level except through petitioning for a variance from the department.

#### Comm 20.06 Procedure for municipalities exercising jurisdiction.

(1) MUNICIPAL JURISDICTION. Pursuant to ss. 101.65 and 101.76, Stats., cities, villages, towns and counties may exercise jurisdiction over the construction and inspection of new dwellings. Municipalities intending to exercise jurisdiction shall adopt the Uniform

Dwelling Code in its entirety. No additional standards within the scope of this code shall be adopted by the municipality unless specific approval has been granted by the department pursuant to s. Comm 20.20. No such municipality shall exercise jurisdiction except in accordance with the following procedure.

- (a) Intent to exercise jurisdiction. Municipalities intending to exercise jurisdiction shall notify the department, in writing, at least 30 days prior to the date upon which the municipality intends to exercise jurisdiction under this code. The notification of intent shall include a statement by the municipality as to which of the following methods will be used for enforcement:
  - 1. Individual municipal enforcement;
  - 2. Joint municipal enforcement;
  - 3. Contract with certified inspector or independent inspection agency;
  - 4. Contract with another municipality;
  - 5. Contract with the department.

# Enforcement Method

The fifth option for method of enforcement, contract with the Department, is generally not available because of limited state staff. Only in situations where a municipality has failed to provide for enforcement, will the state take over enforcement. Even in that situation, the state will contract out the work to an inspection agency or certified inspector.

Municipalities still have a number of options to take to retain a certified inspector. These options are available for both routine and nonroutine situations. This means that if the regular inspector would have a conflict of interest or will be unavailable for a period of time in eccess of 48 hours (two business days), then the municipality should arrange for another inspector, perhaps from an adjoining municipality, to fill in while he is away.

Per this section, a municipality has broad discretion in the means of enforcing the UDC. Under the joint enforcement option, a municipality may delegate enforcement of the UDC erosion control requirements, including legal prosecutorial follow-up, to a county that has adopted the UDC by ordinance. Alternatively, the municipality may contract with the county to provide plan review and inspection services but retain legal prosecutorial follow-up.

(b) Submission of ordinances. Municipalities intending to exercise jurisdiction shall submit all ordinances adopting the uniform dwelling code to the department at the same time as the notice of intent. The department shall review and make a determination regarding municipal intent to exercise jurisdiction over new dwellings within 15 business days of receipt of the municipal ordinances adopting the uniform dwelling code. A municipality may appeal a

determination by the department that an ordinance does not comply with the code. Any appeal shall follow the procedure set out in s. Comm 20.21 (2).

## Submission of Ordinances

A local ordinance adopting the UDC for enforcement should include the following elements:

- 1. The ordinance which names the Uniform Dwelling Code as the construction regulation for the municipality;
- 2. The ordinance which establishes the office of building inspection or which sets forth the authority and duties for inspections to be made;
- 3. The ordinance granting authority to establish fees, with or without the actual fee values; and
- 4. The ordinance which spells out what steps must be followed to accomplish compliance and what fines or forfeitures will be assessed for failure of compliance.

Sample model ordinances are available from the state UDC Program in the Safety and Buildings Division. (A copy is included in the appendix to this commentary.)

(c) Passage of ordinances. A certified copy of all adopted ordinances and subsequent amendments thereto shall be filed with the department within 30 days after adoption.

Note: A copy of a model ordinance for adoption is available from the department.

#### Passage of Ordinances

**Ouestion**:

A township has adopted the code and has had inspections for several years. The township decides it no longer wishes to enforce the code in their municipality. Is it up to the township as to when it will enforce the code and when it can just drop the code? Once the township has adopted the code and have begun inspections, does it have the option of stopping it any time?

Answer:

Per state statute, **all** municipalities are required to enforce all of ch. 20-25 of the UDC. The municipality may later withdraw from local enforcement of the code. Subsection Comm 20.06(1)(a) requires that prior to local adoption and enforcement of the UDC in a municipality, the department must be notified at least 30 days prior to the date of which the municipality intends to exercise jurisdiction. Repeal of a municipal ordinance for the purpose of withdrawing from participation in the program, should be accompanied by notification to the department that such a withdrawal will take place and what other methods of enforcement will be used in that community. If the ordinance is not repealed and not enforced, the town may be exposing itself to some liability.

- (2) COUNTY JURISDICTION. A county ordinance shall apply in any city, village or town which has not enacted ordinances pursuant to this section. No county ordinance may apply until after 30 business days after the effective date of this code unless a municipality within the county informs the department of its intent to have this code administered and enforced by the county. This section shall not be construed to prevent or prohibit any municipality from enacting and administering this code at any time after the effective date of this code. The department shall review and make a determination regarding county jurisdiction over new buildings within 15 business days of receipt of the county ordinances adopting the uniform dwelling code.
- Note: 1: Section 101.651 (3m) and 3s), Stats., allows counties to adopt just the provisions of this code relating to construction site erosion control.
- Note 2: Sections 101.651 (3m) and 3s), Stats., state that counties with a uniform dwelling code erosion control ordinance enforcement program shall enforce the erosion control ordinance provisions on a county-wide basis in all townships which have not adopted the Uniform Dwelling code and may do so in cities and villages which have not adopted the Uniform Dwelling Code.

# County Jurisdiction

This section was originally developed to allow counties to provide enforcement for small municipalities. It offered potential advantages of a centralized building, zoning and sanitary permit issuing office. It was also expected to be a more uniform and efficient enforcement method than each individual town or village hiring its own inspector. It is still an available enforcement option so long as both parties agree to it.

As a result of recent legislation, counties will no longer have the authority to just enforce the erosion control provisions of the UDC. The code will be revised in 2004 to reflect this change.

(3) DEPARTMENTAL JURISDICTION. Pursuant to ss. 101.63 and 101.73, Stats., the department will administer and enforce this code in any municipality which has not adopted, or is not covered by, an ordinance adopted in accordance with this section.

Note: Every 3 years the department will perform performance audits of the erosion control programs of the municipalities administering the program and issue a written determination on whether the municipality complies with the erosion control ordinances and the erosion control standards.

## **Departmental Jurisdiction**

The department currently only seeks contracts with independent inspection agencies or inspectors for inspection services only in those municipalities which fail to adopt an ordinance, unless the municipality is covered by an enforcing county.

#### **Subchapter III — Definitions**

#### Comm 20.07 Definitions.

In chs. Comm 20 to 25:

- (1) "Accessory building" means a detached building, not used as a dwelling unit but is incidental to that of the main building and which is located on the same lot. Accessory building does not mean farm building.
- (2) "Addition" means new construction performed on a dwelling which increases the outside dimensions of the dwelling.
- (3) "Allowable stress" means the specified maximum permissible stress of a material expressed in load per unit area.
- (4) "Alteration" means an enhancement, upgrading or substantial change or modification other than an addition or repair to a dwelling or to electrical, plumbing, heating, ventilating, air conditioning and other systems within a dwelling.
- (5) "Approved" means an approval by the department or its authorized representative. (Approval is not to be construed as an assumption of any legal responsibility for the design or construction of the dwelling or building component.)
- (6) "Attic" means a space under the roof and above the ceiling of the topmost part of a dwelling.
  - (7) A "balcony" is a landing or porch projecting from the wall of a building.
- (7m) "Base flood elevation" means the depth or peak elevation of flooding, including wave height, which has a one percent or greater chance of occurring in any given year.
- (8) "Basement" means that portion of a dwelling below the first floor or groundfloor with its entire floor below grade.
- (8m) "Best management practices" is defined in s. 101.653, Stats., and means practices, techniques or measures that the department determines to be effective means of preventing or reducing pollutants of surface water generated from construction sites.
- (9) "Building component" means any subsystem, subassembly or other system designed for use in or as part of a structure, which may include structural, electrical, mechanical, plumbing and fire protection systems and other systems affecting health and safety.
- (10) "Building system" means plans, specifications and documentation for a system of manufactured building or for a type or a system of building components, which may include

structural, electrical, mechanical, plumbing and variations which are submitted as part of the building system.

- (10m) "Business day" means any day other than Saturday, Sunday or a legal holiday.
- (10t) "Carport" means a structure used fro storing motorized vehicles that is attached toa dwelling and that has at least 2 sides completely unenclosed.
- (11) "Ceiling height" means the clear vertical distance from the finished floor to the finished ceiling.
- (12) "Certified inspector" means a person certified by the department to engage in the administration and enforcement of this code.
- (13) A "chimney" is one or more vertical, or nearly so, passageways or flues for the purpose of conveying flue gases to the atmosphere.
  - (14) "Chimney connector." Same as smoke pipe.
- (15) "Closed construction" means any building, building component, assembly or system manufactured in such a manner that it cannot be inspected before installation at the building site without disassembly, damage or destruction.
- (15g) "Coarse aggregate" means granular material, such as gravel or crushed stone, that is predominately retained on a sieve with square openings of 4.75 mm or 0.18 inch.
- (15m) "Coastal floodplain" means an area along the coast of Lake Michigan or Lake Superior below base flood elevation that is subject to wave runup or wave heights of 3 feet or more.
  - (16) "Code" means, chs. Comm 20 to 25, the Wisconsin uniform dwelling code.
- (17) "Combustion air" means the total amount of air necessary for the complete combustion of a fuel.
- (19) "Compliance assurance program" means the detailed system documentation and methods of assuring that manufactured dwellings and dwelling components are manufactured, stored, transported, assembled, handled and installed in accordance with this code.
- (19m) "Composting toilet system" means a method that collects, stores and converts by bacterial digestion nonliquid-carried human wastes or organic kitchen wastes, or both, into humus

- (20) "Cooling load" is the rate at which heat must be removed from the space to maintain a selected indoor air temperature during periods of design outdoor weather conditions.
- (21) "Dead load" means the vertical load due to all permanent structural and nonstructural components of the building such as joists, rafters, sheathing, finishes and construction assemblies such as walls, partitions, floors, ceilings and roofs, and systems.
- (21m) "Deck" means an unenclosed exterior stucture, attached or adjacent to the exterior wall of a building, which has a floor, but no roof.
  - (23) "Department" means the department of Commerce.
- (24) "Detached building" means any building which is not physically connected to the dwelling.
- (24m) "Dilution air" means air that is provided for the purpose of mixing with flue gases in a draft hood or draft regulator.
- (24r) "Direct-vent appliance" means a gas-burning appliance that is constructed and installed so that all air for combustion is derived directly from the outside atmosphere and all flue gases are discharged to the outside atmosphere.
- (25) "Dwelling" means any building, the initial construction of which is commenced on or after the effective date of this code, which contains one or 2 dwelling units.
- (26) "Dwelling contractor" means any person, firm or corporation engaged in the business of performing erosion control or construction work such as framing, roofing, siding, insulating, masonry or window replacement work covered under this code and who takes out a building permit. "Dwelling contractor" does not include the owner of an existing dwelling, an owner who will reside in a new dwelling or a person, firm or corporation engaging exclusively in electrical, plumbing, or heating, ventilating, and air conditioning work.
  - (27) "Dwelling unit" means a structure, or that part of a structure, which is used or intended to be used as a home, residence or sleeping place by one person or by 2 or more persons maintaining a common household, to the exclusion of all others.

# **Dwelling Unit**

**Question**: What constitutes a separate dwelling unit?

Answer: The key phrase in the definition is ". . . common household, to the exclusion of all

others." So if two living areas have separate exiting and no common use areas,

then they are separate dwelling units.

(28t) "Erosion" means the detachment and movement of soil, sediment or rock fragments by water, wind, ice or gravity.

(28v) "Erosion control procedure" means a practice or a combination of practices implemented to prevent or reduce erosion and the resulting deposition of soil, sediment or rock fragments into waters of the state, public sewers or off the owner's land. These procedures include, but are not limited to, silt or filter fences, straw or hay bales, tarps or riprap, berms, sediment basins or vegetative strips.

Note: See Appendix E for examples and illustrations.

- (29) "Exit" means a direct, continuous, unobstructed means of egress from inside the dwelling to the exterior of the dwelling.
- (29m) "Existing dwelling" means a dwelling erected prior to the effective date of this code, one for which a valid building permit exists, or one for which lawful construction has commenced prior to the effective date of this code.

Note: See s. Comm 20.03 for the effective date of chs. Comm 20-25.

(30) "Farm operation" is the planting and cultivating of the soil and growing of farm products substantially all of which have been planted or produced on the farm premises.

Note: According to s. 102.04 (3), Stats., the farm operation includes the management, conserving, improving and maintaining of the premises, tools, equipment improvements and the exchange of labor or services with other farmers; the processing, drying, packing, packaging, freezing, grading, storing, delivery to storage, carrying to market or to a carrier for transportation to market and distributing directly to the consumer; the clearing of such premises and the salvaging of timber and the management and use of wood lots thereon but does not include logging, lumbering and wood-cutting operations unless the operations are conducted as an accessory to other farm operations.

- (31) "Farm premises" is defined to be the area which is planted and cultivated. The farm premises does not include greenhouses, structures or other areas unless used principally for the production of food or farm products.
- (32) "Farm products" are defined as agricultural, horticultural and arboricultural crops. Animals considered within the definition of agricultural include livestock, bees, poultry, furbearing animals, and wildlife or aquatic life.
  - (33) "Farming" means the operation of a farm premises owned or rented by the operator.
- (33m) "Fireblocking" means a material or device used to retard or prevent the spread of flame or hot gases through concealed spaces into adjacent rooms or areas.
  - (34) "Firebox" means that part of the fireplace used as the combustion chamber.
- (34e) "First floor" means the first floor level above any groundfloor or basement or, in the absence of a groundfloor or basement, means the lowest floor level in the dwelling.
  - (34f) "Flight" means a continuous series of steps with no intermediate landings.

- (34g) "Floodfringe area" means that portion of the floodplain outside of the floodway that is at or below base flood elevation. The term "floodfringe" is intended to designate an area of standing, rather than flowing, water.
- (34h) "Floodplain" means land which is subject to flooding which is at or below base flood elevation. The floodplain includes the floodway and floodfringe areas.
- (34i) "Floodway" means the channel of a river or stream and those portions of the floodplain adjoining the channel required to carry the flood discharge. The term "floodway" is intended to designate an area of flowing, rather than standing, water.
- (34m) "Floor area" means the area of a room that has a ceiling height of at least 7 feet. Rooms with ceilings less than 7 feet in height for more than 50% of the room are not considered to be floor areas.
- (35) "Garage" means a structure used for storing motorized vehicles that has any more than 2 sides completely enclosed.
- (36) "Gas appliance" means any device that uses gas as a fuel or raw material to produce light, heat, power, refrigeration or air conditioning.
- (36m) "Groundfloor" means that level of a dwelling, below the first floor, located on a site with a sloping or multilevel grade and which has a portion of its floor line at grade.

#### Ground Floor

Question: Does the fact that a floor level has a single exit to grade automatically make that

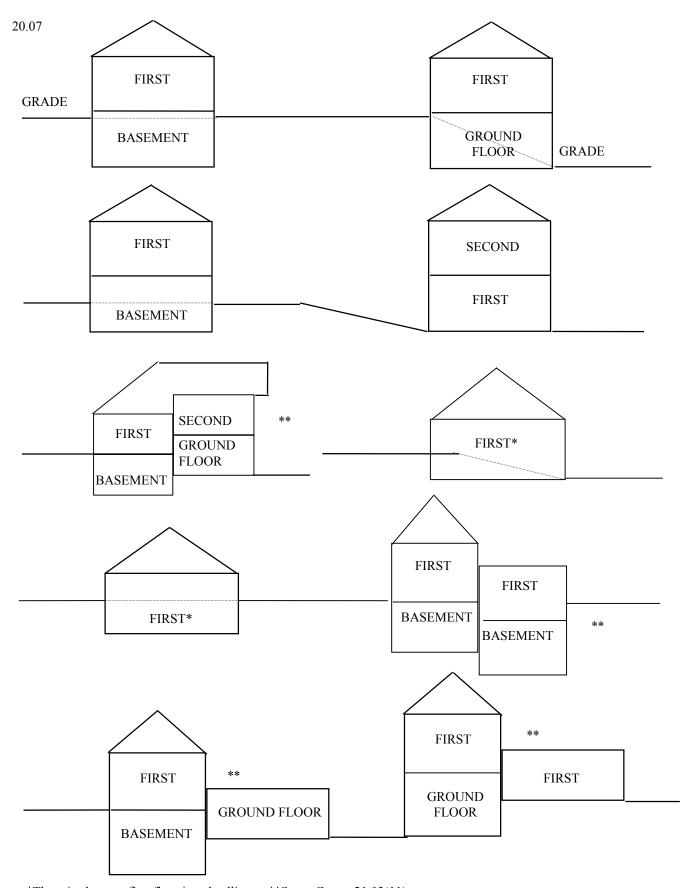
entire floor a ground floor although the remainder of the level could be fully below

grade?

Answer: Yes, this would be a ground floor, with or without the exit per the definition of this section. The designer could use areaways (window wells) to provide natural light

or leave the floor level unfinished as nonhabitable storage and utility area. If the answer is yes, then all habitable rooms on this level would be required to have natural light since the exception for basements in s. Comm 21.05(1)(a) would not

apply.



\*There is always a first floor in a dwelling \*\*See s. Comm 21.03(11)

s. Comm 20.07 (8), (34k), 36m) BASEMENT, FIRST FLOOR AND GROUND FLOOR DEFINITIONS

(37) "Habitable room" means any room used for sleeping, living or dining purposes, excluding such enclosed places as kitchens, closets, pantries, bath or toilet rooms, hallways, laundries, storage spaces, utility rooms, and similar spaces.

#### Unfinished Rooms

Question:

What constitutes a habitable room in terms of completion? Oftentimes a plan shows a "future" room, but at the time of final inspection, such a room appears to be used as a recreation room without being completed. When should all habitable room features, such as ceiling height, natural light, ventilation, electrical outlets, wall and ceiling finishes, be required?

Answer:

If a room is intended to be habitable at the time of occupancy, then the required "habitable room features" must be present. However, inspectors usually finish their job prior to occupancy, and give conditional occupancy. It is usually fruitless to insist on total completion of such spaces. These unfinished rooms may be allowed as long as they are not inhabited when the owner wishes to occupy the dwelling. They should call for a follow-up inspection to release any occupancy conditions. However, in no case should partially completed rooms pose an increased health or safety hazard such as in the case of exposed wiring. See the discussion regarding final inspections under s. 20.10(1)(b)3. of this commentary.

- (38) "Hearth" means the floor area within the fire chamber of a fireplace.
- (38m) "Hearth extension" means the surfacing applied to the floor area extending in front of and at the sides of the fireplace opening.
- (40) "Heating load" is the estimated heat loss of each room or space to be heated, based on maintaining a selected indoor air temperature during periods of design outdoor weather conditions. The total heat load includes: the transmission losses of heat transmitted through the wall, floor, ceiling, glass or other surfaces; and either the infiltration losses or heat required to warm outdoor air used for ventilation.

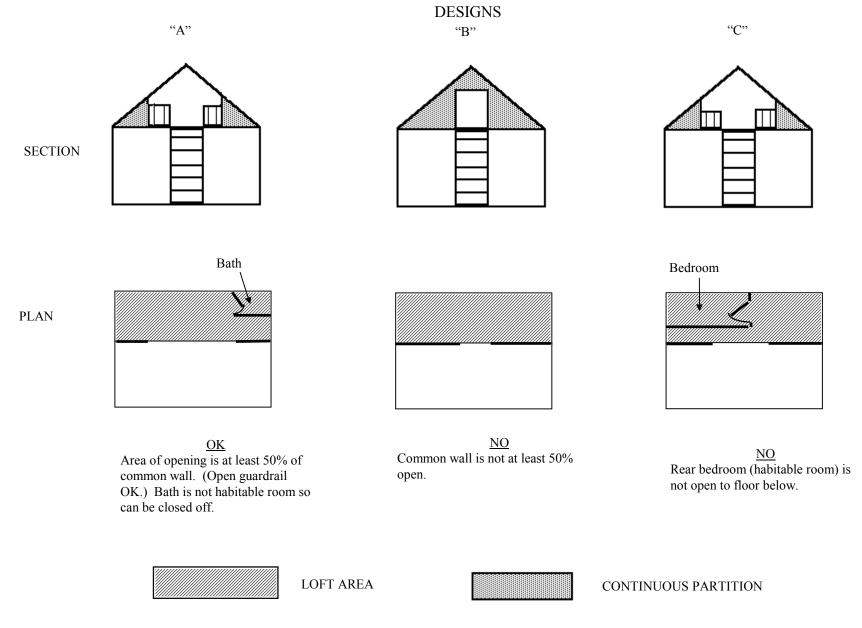
Note: Infiltration losses include heat required to warm outside air which leaks through cracks and crevices, around doors and windows or through open doors and windows.

- (40m) "Hollow unit" means a masonry unit which has a net cross-sectional area parallel to the bearing face which is less than 75% of the gross cross-sectional area.
- (40t) "Incinerating toilet" means a self-contained device for the treatment of nonliquid carried wastes that deposits the wastes directly into a combustion chamber, reduces the solid portion to ash and evaporates the liquid portion.
- (41) "Independent inspection agency" means any person, firm, association, partnership or corporation certified by the department to perform certified inspections under this code.

- (42) "Initial construction" means the date of issuance of the Wisconsin uniform building permit.
  - (43) "Insignia." See "Wisconsin insignia."
- (44) "Installation" means the assembly of a manufactured building on site and the process of affixing a manufactured building to land, a foundation, footing or an existing building.
  - (46) "Kitchen" means an area used, or designed to be used, for the preparation of food.
- (47) "Landing" means the level portion of a stairs located between flights of stairs or located at the top and foot of a stairs.
- (48) "Listed and listing" means equipment or building components which are tested by an independent testing agency and accepted by the department.
- (49) "Live load" means the weight superimposed on the floors, roof and structural and nonstructural components of the dwelling through use and by snow, ice or rain.
- (50) "Loft" means an upper room or floor which has at least 50% of the common wall open to the floor below. The opening may be infringed upon by an open guardrail constructed in compliance with s. Comm 21.04 (2), but not by a window or half-wall guardrail. All habitable rooms of lofts are open to the floor below.

#### <u>Loft</u>

It is important that a loft be open to the floor below so that there is good sound communication, clear sight lines and adequate air (and odor) movement between levels as well as the possibility of jumping down between levels. These factors are important so that occupants are quickly alerted to any problems elsewhere in the dwelling. This early alert offsets the relaxed exiting requirement in s. Comm 21.03(4). This section requires only one stairway or ladder and no egress windows, no matter what level above grade that the loft is. Note that the definition requires all habitable rooms to be open to the floor below. See diagrams.



- (51) "Manufacture" means the process of making, fabricating, constructing, forming or assembling a product from raw, unfinished, semifinished or finished materials.
- (52) (a) "Manufactured dwelling" means any structure or component thereof which is intended for use as a dwelling and:
- 1. Is of closed construction and fabricated or assembled on site or off site in manufacturing facilities for installation, connection or assembly and installation at the building site; or
- 2. Is a building of open construction which is made or assembled in manufacturing facilities away from the building site for installation, connection, or assembly and installation on the building site and for which certification is sought by the manufacturer.
- (b) The term manufactured dwelling does not include a building of open construction which is not subject to par. (a) 2. A single or double width manufactured (mobile) home is not considered a manufactured dwelling and is not subject to this code.
- (53) "Mechanical draft venting system" means a venting system for a gas burning appliance that is designed to remove flue or vent gases by mechanical means, such as a fan, which may consist of an induced draft portion under non-positive static pressure or a forced draft portion under positive static pressure.
- (53m) "Multiple station smoke alarm" means an assembly that incorporates the smoke detector, the control equipment and the alarm-sounding device in one unit that is capable of being interconnected with one or more additional alarms so that the actuation of one alarm causes the operation of all interconnected alarms.
- (54) A "multi-wythe wall" is a masonry wall composed of 2 or more wythes of masonry units tied or bonded together.
  - (55) "Municipality" means any city, village, town or county in this state.
- (55m) "Naturally vented appliance" means an appliance with a venting system designed to remove flue or vent gases under non-positive static vent pressure entirely by natural draft.
- (56) "Open construction" means any building, building component, assembly or system manufactured in such a manner that it can be readily inspected at the building site without disassembly, damage or destruction.
  - (57) "Owner" means any person having a legal or equitable interest in the dwelling.
- (58) "Perm" means a unit of permeance which is measured in grains per (hour) (square foot) (inch of mercury vapor pressure difference).

Note: The lower the perm rating of a material is, the more difficult it is for water vapor to pass through it.

- (59) "Pilaster" is a projection of masonry or a filled cell area of masonry for the purpose of bearing concentrated loads or to stiffen the wall against lateral forces.
- (59m) "Porch" means an unenclosed exterior structure at or near grade attached or adjacent to the exterior wall of any building, and having a roof and floor.
- (59t) "Privy" means an enclosed nonportable toilet into which nonwater-carried human wastes are deposited to a subsurface storage chamber.
- (61) "Repair" means the act or process of restoring to original soundness, including redecorating, refinishing, nonstructural repairs, or maintenance, or the replacement of existing fixtures, systems or equipment with the equivalent fixture, system or equipment.

#### Repairs

The determination of what constitutes a repair is often best made by the local building inspector. Many municipalities have guidelines to distinguish between repair and alteration. Some consider square footage, cost of construction, or whether it affects exiting or structural features. The following discussion should be considered supplemental to local guidelines.

A <u>repair</u> normally involves work to maintain an existing system or feature of the building without changing it from its original condition at the time of original construction. An <u>alteration</u> normally involves a change or modification of an existing system or feature to the extent that is now subject to different code regulations.

#### Examples:

- 1. The rebuilding of a rotted out sliding patio door to a swinging type door when that opening is required as an exit will be an alteration and not repair or maintenance. The door width, exit operation (swing) and header size may be altered and deserves code review under the current code.
- 2. The replacement of a toggle type light switch to a dimmer type light switch would be considered repair or maintenance. No change in function.
- 3. Replacement of siding could be considered an alteration if its intent was to affect compliance with the energy conservation rules. However, new siding placed over the top of old siding would be considered maintenance or repair not coming within the scope of the code.
- (62) "Shingle" means a unit of roof covering material that has been manufactured to specific dimensions and is applied in overlapping fashion. "Shingle" includes all of the following:

- (a) "Fiberglass asphalt shingle" means a type of shingle with an internal mat composed of nonwoven, resin-bonded glass fibers, that is impregnated and coated with asphalt.
- (b) "Laminated shingle" means a shingle with a second layer of asphalt and mat laminated to the first layer, usually in a design pattern to simulate the dimensional appearance of natural slate or wood shakes.
- (c) "Organic asphalt shingle" means a shingle with an internal mat composed of organic fibers, such as cellulose, that is saturated and coated with asphalt.
- (d) "Strip shingle" means a rectangular shingle that relies either on a sealant or on a combination of weight and stiffness to resist wind uplift, rather than using interlocking tabs.
  - (63) A "single-wythe wall" is a masonry wall consisting of one unit of thickness.
- (63m) "Site" means all contiguous property under single ownership where land-disturbing activity has been proposed for the purpose of constructing a dwelling.
- (64) A "smoke chamber" is that part of a fireplace which acts as a funnel to compress the smoke and gases from the fire so that they will enter the chimney above.
- (65) A "smoke pipe" is a connector between the solid or liquid fuel-burning appliance and the chimney.
- (65m) "Solid unit" means a masonry unit which has a net cross-sectional area parallel to the bearing face which is 75% or more of the gross cross-sectional area.
- (65r) "Stabilized" means action taken at a site to minimize erosion by mulching and seeding, sodding, landscaping, placing concrete or gravel, or other techniques to prevent soil loss.
- (66) A "stairway" is one or more flights of steps, and the necessary platforms or landings connecting them, to form a continuous passage from one elevation to another.
  - (67) "Step(s)" is a unit(s) consisting of one riser and one tread, alone or in series.
- (68) A "story" is that portion of a building located above the basement, between the floor and the ceiling.
- (69) A "stove" is a nonportable solid-fuel-burning, vented, nonducted heat-producing appliance located in the space that it is intended to heat. This definition does not include cooking appliances.
  - (70) "Stovepipe." Same as smoke pipe.

- (71) "Strain" means a change in the physical shape of a material caused by stress.
- (72) "Stress" means internal resistance to an external force expressed in load per unit area; stresses acting perpendicular (compression or tension) to the surface, shear stresses acting in the plane of the surface, or bending stresses which cause curving.
- (73) "Structural analysis" is a branch of the physical sciences which uses the principles of mechanics in analyzing the impact of loads and forces and their effect on the physical properties of materials in the form of internal stress and strain.
- (75) The "throat" of a fireplace is the slot-like opening above the firebox through which flames, smoke and other products of combustion pass into the smoke chamber.
  - (76) "Vent" means a vertical flue or passageway to vent fuel-burning appliances.
- (77) A "vent connector" is a connector between a fuel-burning appliance and the chimney or vent.
- (77m) "Waters of the state" includes those portions of Lake Michigan and Lake Superior within the boundaries of Wisconsin, and all lakes, bays, rivers, streams, springs, ponds, wells, impounded reservoirs, marshes, watercourses, drainage systems and other surface waters or groundwaters, natural or artificial, public or private, within the state or its jurisdiction.
- (78) "Window" means a glazed opening in an exterior wall, including glazed portions of doors, within a conditioned space.
- (78m) "Wisconsin Administrative Permit" means a permit issued by a municipality that does not conduct inspections or plan reviews under this code.
- (79) "Wisconsin insignia" means a device or seal approved by the department to certify compliance with this code.

# Subchapter IV — Approval and Inspection of One- and 2-Family Dwellings

#### Comm 20.08 Wisconsin uniform building permit.

A Wisconsin uniform building permit shall be obtained from the department or the municipality administering and enforcing this code before any on-site construction, including excavation for a structure, within the scope of this code is commenced, except where a permit to start construction has been issued in accordance with s. Comm 20.09 (5) (b) 2. A Wisconsin uniform building permit shall not be required for repairs.

Note: Section Comm 20.09 (5) (b) 2. permits the issuance of a footing and foundation permit prior to the issuance of the Wisconsin uniform building permit.

#### Overview

An overview of the approval and enforcement process:

- 1. Owner or agent submits a Uniform Building Permit Application and complete building plans to the municipality or third party agency administering and enforcing the code.
- 2. The administration and enforcement agency approves or disapproves the plans based upon a review of the submittal documents.
- 3. If the plans are approved then the applicant is issued a Uniform Building Permit. If this is the original construction of the dwelling, the building permit shall have a Building Permit Seal attached or number designated.
- 4. The Wisconsin Uniform Building Permit shall be posted at the construction site. Inspections shall be recorded by the inspector when they are performed.
- 5. The administering and enforcing agency shall inspect the building in various required stages of completion. A record of these inspections shall be kept by the enforcing agency.
- 6. When the final inspection report is issued without any health or safety violations, the home may be occupied.

Forms and seals needed for administering and enforcing the code can be obtained by municipalities from the state UDC Program by using the standard Department of Commerce Material Order (Form SBD-8262).

Records generated by the plan review and inspection functions are subject to the open-records law. Plans need to be retained for four years and applications, orders and correspondence should be retained for seven years by the municipality. It is also advisable that inspectors maintain logs of permits issued and inspections made.

Financial records may need to be retained longer for auditing purposes. However, records should only be disposed of per a local records disposal ordinance and after clearance by the State Historical Society. Contact your municipal clerk for further guidance.

# Wisconsin Uniform Building Permit

A Wisconsin Uniform Building Permit Card (Form SBD-5824) must be issued prior to any construction of one- and two-family dwellings that are not exempted by s. Comm 20.05. Note that repairs as defined in s. Comm 20.07(61), do not require a permit, although continued compliance with the Code at time of original construction is required. Per s. Comm 20.04(1), additions and alterations do require a permit and are subject to current code. See s. Comm 20.07(61) of the code and this commentary for the definition and discussion of "repairs."

Failure to obtain a permit prior to construction may result in fines and increased permit fees as required by local ordinance. Also, any concealed work may need to be uncovered to allow inspection.

Municipalities may issue one building permit to cover all categories of construction or the municipalities have the option of issuing building permits to individually cover each category of construction (construction, heating/ventilating/air conditioning, electrical and plumbing). A separate building permit should not be issued for energy since the energy conservation measures are integral with the four major construction categories. Builders also have the option of applying for separate permits.

Regardless whether separate heating, plumbing or electrical permits are used, only <u>one</u> permit seal per dwelling should ever be issued and it should accompany the initial "construction" building permit.

The Wisconsin Uniform Building Permit Application may be used locally for all project types. However, UDC seals would only be issued on new one- and two-family projects. Also, a municipality may request additional information on their form.

A UDC permit must now be obtained before excavating for a dwelling. In those municipalities and counties in which a separate UDC erosion control permit is issued, this permit may be issued before or after the balance of the UDC permit is issued. The intent is to ensure that proper erosion control measures will be planned for.

#### Comm 20.09 Procedures for obtaining uniform building permit.

- (1) APPLICATION FOR A WISCONSIN UNIFORM BUILDING PERMIT. Application for a Wisconsin uniform building permit shall be on the forms obtained from the department or the municipality administering and enforcing this code. No application shall be accepted that does not contain all the information requested on the form.
  - Note 1: See appendix for a copy of the Wisconsin uniform building permit and application.
- Note 2: Any municipality exercising jurisdiction may require reasonable supplementary information not contained on the Wisconsin building permit application.

# INSTRUCTIONS FOR COMPLETING THE WISCONSIN UNIFORM BUILDING PERMIT APPLICATION (FORM SBD-5823 (R. 07/95))

The owner, builder or agent shall complete and provide all required information on the application form through the applicant signature block. This data is used for statewide

statistical gathering on new one- and two-family dwellings, as well as for local code administration.

# PERMIT REQUESTED

- Check off type of permit requested, such as structural, HVAC, electrical or plumbing.
- *Fill in owner's name, address and telephone number.*
- Fill in contractor's name, address and telephone number.

#### **PROJECT LOCATION**

- Fill in building address (number and street or sufficient information so that the building inspector can locate the construction site).
- Fill in legal description of lot, subdivision name, lot number and block number.
- Fill in zoning district, lot area and required building setbacks.

#### PROJECT DATA

- Fill in all numbered project data blocks (1-14) with the required information per the following:
- 2. Area

Basements - include unfinished area only.

Living Area - include any finished area including finished areas in basements.

For two-family dwellings, include combined total areas.

- 3. Check type of occupancy "Single-Family" or "Two-Family" if that is what is being worked on. In other words, do not check either of these two blocks if only a new detached garage is being built, even if it serves a one- or two-family dwelling. Instead, check "Other" and indicate "garage" and number of stalls. If project is a community based residential facility serving 3 to 8 residents, it is considered a single-family dwelling.
- 9. HVAC Equipment check only the major source of heat, plus central air conditioning if present. Only check "Radiant Baseboard or Panel" if there is no central source of heat.
- 14. Estimated Cost Include the total cost of construction, but not land or landscaping costs.

#### **SIGNATURE**

- Sign and date application form.

## **CONDITIONS OF APPROVAL**

The authority having jurisdiction is to use this section to state any conditions that must be complied with pursuant to the issuing of a building permit.

#### **ISSUING JURISDICTION**

This must be completed by the AUTHORITY HAVING JURISDICTION.

Check off MUNICIPALITY STATUS, such as town, village or city.

Fill in MUNICIPALITY NAME and MUNICIPALITY NUMBER OF INSPECTION AUTHORITY.

Fill in MUNICIPALITY NUMBER OF DWELLING LOCATION IF DIFFERENT from municipality where inspection authority is located (applies to V.I.P. inspections, county enforcement, state contracted inspections or multi-county municipalities).

Check off type of permit issued, such as construction, HVAC, electrical or plumbing.

Fill in WISCONSIN UNIFORM PERMIT SEAL number, if project is a new one- or two-family dwelling.

Fill in name and certification number of person reviewing building plans and date that building permit was issued.

(2) FILING OF PERMITS. (a) Wisconsin uniform building permit application. The Wisconsin uniform building permit application shall be filed with the municipality administering and enforcing this code or its authorized representative. The municipality shall forward a copy of all applications to the department within 30 business days after permit issuance. Pursuant to s. 101.65 (1m), Stats., a municipality may not issue a building permit for construction work covered under chs. Comm 21 and 22 to a dwelling contractor unless the contractor has a dwelling contractor financial responsibility certification issued by the department.

Note: See s. Comm 20.07 (26) for the definition of "dwelling contractor."

(b) Wisconsin administrative permit. The Wisconsin administrative permit shall be filed with the municipality and the department when the dwelling is located in a municipality that does not enforce the code.

# Administrative Permit

Because of the UDC law change in December 2003, the adminitrative permit section of the code will be deleted since there will be UDC enforcement statewide.

Filing of the Wisconsin Uniform Building Permit Application

Where a municipality or county does not enforce the code, an applicant must file the application with the inspector contracted by Department of Commerce for enforcement services.

A copy of the Uniform Building Permit Applications issued by the municipality must be submitted monthly to the department for each building constructed under the Uniform Dwelling Code. (Do not submit a copy of the application for a building exempt from compliance with the Uniform Dwelling Code.) Data from these permit applications is tabulated by the department and published in the monthly <u>Wisconsin Building Codes Report</u>, which may be subscribed to with the publications order form at the front of this commentary or on line at our web-site.

The department strongly encourages municipalities to adopt a one-stop permit program for UDC requirements, as well as non-UDC requirements, so as to minimize the regulatory burden on permit applicants. This is not always possible due to staffing arrangements or delegation of erosion control authority to the county.

Wisconsin Division of Safety and Buildings		WISCONSIN UNIFORM BUILDING							Aŗ	Application No.				
Wisconsin Stats. 101.63,	ctions or	PERMIT APPLICATION  ions on back of second ply. The information you provide may be							Parcel No.					
				government agency programs (Privacy Law, s. 15.04 (1)(m)						0.				
PERMIT REQUEST	ED	nstr. 🗆 🗎	HVA	.C 🗆 Electr	ic 🗆 Plumbin	g 🗆 Eros	ion Con	trol Oth	er:					
Owner's Name				iling Address						Tel.				
Contractor's Name: □Co	on □Elec □HVAC	□Plbg	Lic	Lic/Cert# Mailing Address								Tel.		
								FAX						
Contractor's Name: □Co	on □Elec □HVAC	□Plbg	Lic	/Cert#	Mailing Address				Tel.					
											FAX			
Contractor's Name: □Con □Elec □HVAC □Plbg				Lic/Cert# Mailing Address							Tel.			
								FAX						
Contractor's Name: □Con □Elec □HVAC □Plbg				Lic/Cert# Mailing Address						Tel.				
											FAX			
PROJECT LOCATION	Lot area	Se	q. ft.			1/4,	1/4,	of Section	1	,	T	N,	R	E (or)
				n Name										
Building Address		Subdi	1 V 1 S 1 O	ıı ıvame				Lot No.			Block	K INO.		
Zoning District(s)	Zoning	Permit 1	No.		Setbacks:	Front	ft.	Rear	ft.	Lef		ft.	Right	ft.
1. PROJECT	3. OCCUPANCY	1	6. ELI	ECTRICAL	9. HVAC EQU	JIPMENT		ERGY SC				11.		11.
□ New □ Repair	☐ Single Family			ce Panel	☐ Forced Air F		Fue		Gas	LP	Oil	Elec	Solid	Solai
$\square$ Alteration $\square$ Raze	☐ Two Family	1			☐ Radiant Bas	☐ Radiant Basebd/ Panel								
$\square$ Addition $\square$ Move	☐ Garage	☐ Undergrour		-	☐ Heat Pump		Water							
□ Other:	□ Other: □ Other:			rhead	☐ Boiler	☐ Dwelling unit has 3 kilowatt or more in electric space					ace			
			7. FOUNDATION		☐ Central Air Cond.		heating equipment capacity.							
2. AREA INVOLVED	4. CONST. TYPE				□ Other:	13. HE	CAT LOSS							
Unfin.	☐ Site-Built				Treated Wood 10. SEWER									
BsmtSq Ft	☐ Mfd: ☐ WI UDC							BTU/HR Total						
Living	□ U.S. HU	S. HUD			☐ Municipal	Envelope and Infiltration Losses ("Maximum Allowable								
AreaSq	5. STORIES	8. USE			-			Heating Equipment Output" on Energy Worksheet;						
Ft	☐ 1-Story	[	□ Seas	sonal	_		"Total Building Heating Lo			g Load"	ad" on Wischeck report)			
GarageSq Ft	□ 2-Story	-			11. WATER 14. EST. BUILDING COST									
DeckSq Ft.			□ Oth	er:	☐ Municipal Utility ☐ Private On-Site Well \$									
I agree to comply with all ap		and ordin	nance	s and with the				at the issua	ance o	f the pe	ermit cre	ates n	o legal li	ability,
express or implied, on the sta I have read the cautionary sta														
authorized agent, permission														
APPLICANT'S SIG	GNATURE						_	DATE	SIC	GNEI	D			
APPROVAL CONI					he following cond				esult i	n suspe	ension or	revoc	ation of	this
	peri	nit or othe	er pen	aity.   See a	ttached for cor	iaitions oi	approva	41.						
ISSUING JURISDICTION	□ Town □ V	illage		City □ S	tate of:		N	Municipalit	y Nun	nber of	Dwellin	g Loc	ation	
			MITO	S) ISSUED	WIS PERMIT	EAL# PERMIT ISSUED			RV.					
				uction	WISTERWILL)	JEILE IT	I ERWIII ISSUED BY:							
Inspection \$			VAC				Name							
Wis. Permit Seal \$Other \$			lectri				Date Tel							
· <del></del>		□ Plumbing □ Erosion				Cert No								
Total \$														
SBD-5823(R.02/00)	Distribution: $\square$ Ply 1 -	Issuing Ju	urisdic	ction □Ply 2 -	Municipality For	rwards to Sta	ate If Nev	Dwelling		y 3 - In	spector	□Ply	4 - App	licant

- (3) FEES. (a) Municipal fees. Fees shall be submitted to the municipality at the time the Wisconsin uniform building permit application for new construction is filed. The municipality shall, by ordinance, determine fees to cover expenses of plan examination, inspection and the issuance of the Wisconsin uniform building permit. The municipality shall collect and send to the department the fee for Wisconsin uniform building permits issued for new dwellings in accordance with s. Comm 2.34.
- (b) Department fees. Where the department administers and enforces the code, the fees for plan examination, inspection, and the issuance of the Wisconsin uniform building permit, in accordance with s. Comm 2.34, shall be submitted to the department, or its authorized representative, at the time the Wisconsin uniform building permit application is filed.
- (c) Soil erosion fees. Counties enforcing construction site erosion control provisions of the code shall collect and submit the fee for Wisconsin uniform building permits to the department.

#### Fees

Municipalities administering and enforcing the code may establish fees to cover expenses. The fees charged should allow for administration cost, plan review, inspections and Building Permit Seal. (Contact the State UDC Program for further information on setting inspection fees.)

Where the UDC is <u>enforced</u>, a Department of Coimmerce Building Permit Seal must be assigned to each new dwelling by the municipality and is ordered for \$25.00 from the state UDC Program using the UDC Material Order Form (SBD-8262 (R. 04/96)). A Building Permit Seal is only required with the <u>INITIAL CONSTRUCTION PERMIT</u> for a dwelling. Seals must be issued for both site-built and manufactured dwelling permits. Subsequent permits for additions and alterations do not require a seal. Seals are not assigned to site-built additions to mobile (manufactured) homes. Seals are not assigned to a single living unit contained in a commercial building or to the conversion of a nonresidential building to a new dwelling.

Counties enforcing the UDC erosion control provisions in municipalities without a UDC enforcement program shall purchase and assign a UDC permit seal for each new dwelling for which it issues a UDC building permit. A county should not assign a seal to a dwelling that is subject to a local municipal UDC program and that should have been assigned a seal by the local municipality.

Following is an example seal. (Seal Color is Orange)



- (4) SUBMISSION OF PLANS. At least 2 sets of plans for all one- and 2-family dwellings shall be submitted to the department, or the municipality administering and enforcing this code, for examination and approval at the time the Wisconsin uniform building permit application is filed. A municipality exercising jurisdiction may require a third set of plans at its option.
- (a) Required building plans. The required building plans shall be legible and drawn to scale or dimensioned and shall include the following:

# Required Building Plans

The agency approving the plans has the right to request additional information to clarify drawings and data necessary to ensure that the building shall comply with the Uniform Dwelling Code when built. It should be remembered that it is much easier to correct a design on paper than when it is built.

Although manufactured dwellings will have their plans approved by the department, the plans for any on-site construction are submitted to the enforcing municipality along with the Building Permit Application. A UDC Seal is assigned to the on-site work just as for any new dwelling.

Following are checklists for plan submittals for both site-built and manufactured dwellings. Also following is a cross-sectional drawing showing major code items.

The use of each room shall be shown to allow proper review for light, ventilation, exiting and other requirements.

- 1. Plot plan. a. The plot plan shall show the location of the dwelling and any other buildings, wells, surface waters and disposal systems on the site with respect to property lines. The location of the non-tracking access roadway, as required under s. Comm 21.125 (1) (c), shall be shown. For sites greater than 5 acres, the plot plan shall indicate the area of land-disturbing activity within the site.
- b. The plot plan shall show the direction of all slopes on the site. Sectors within the area of land disturbing activity shall be designated and labeled on the plot plan in the appropriate slope category: less than 12% slope; 12% to 20% slope; and greater than 20% slope. The plot plan shall indicate initial erosion control measures as specified in s. Comm 21.125 based on slopes existing immediately prior to building construction.

Note: A 12% slope equals 6.8 degrees from the horizontal and has a rise to run ratio of 3 to 25.

Note: A 20% slope equals 11.3 degrees from the horizontal and has a rise to run ratio of 1 to 5.

Note: See Appendix for examples of plot plans indicating erosion control measures.

- 2. Floor plans. Floor plans shall be provided for each floor. The size and location of all rooms, doors, windows, structural features, exit passageways and stairs shall be indicated. The use of each room shall be indicated. The location of plumbing fixtures, chimneys, and heating and cooling appliances, and, when requested, a heating distribution layout shall be included.
- 3. Elevations. The elevations shall contain information on the exterior appearance of the building, indicate the location, size and configuration of doors, windows, roof, chimneys, exterior grade, footings and foundation walls, and include the type of exterior materials.
- (b) Data required. All required plans submitted for approval shall be accompanied by sufficient data, calculations and information to determine if the dwelling will meet the requirements of this code. The data and information for determining compliance with the energy conservation standards shall be submitted on forms provided by the department or other approved forms. Except as required under s. Comm 21.33, a municipality exercising jurisdiction may not require plans or calculations to be stamped by an architect or engineer.

## Architect- or Engineer-Stamped Plans

This section details the procedures for obtaining a Uniform Building Permit, including plan submission requirements. This section allows municipalities to require engineered plans and calculations but prohibits a municipality or the department to require such plans or calculations to be prepared or stamped by a registered architect, engineer or designer.

It is agreed that some plans may be difficult to review by inspectors due to complicated structural framing or other innovative design concepts. The inspector has the option under s. Comm 20.09(4)(b) to request sufficient data and information to determine if the dwelling will meet the requirements of the code. The authority to request such information does not include authority to require that the plans be "stamped" by a registered professional architect, engineer, or designer. However, the inspector should require that the plans or calculations clearly indicate they were prepared for the dwelling in question. The inspector should also require that preparers identify themselves and date the plans and/or calculations.

If the inspector does not feel qualified to review innovative or structurally complex designs, the inspector can forward the plans and calculations to the Department of Commerce for review and approval. The department will charge a fee for such a review per s. Comm 69.21(3)(a). Since the Department of Commerce would perform this service for the municipality, the municipality would be billed for the review. It is expected that the municipality will collect this fee from the owner and forward it to the state in satisfaction of the billing prior to issuing the permit.

Per s. Comm 2.34(2)(a), the plan review fee shall be assessed and computed on the basis of \$60.00 per hour or \$120.00 per plan, whichever is greater

# Building Permit Checklist - Site-Built Homes

This is a checklist for submitting drawings and information when making application for a Wisconsin Uniform Building Permit for a site-built home.

Drawings must be legible and drawn to scale or dimensioned and include:

- 1. A plot plan showing the location of the dwelling and any other buildings, wells and disposal systems on the property with respect to property lines. For rural areas, include directions for locating dwelling.
- 2. Floor plan which shows:

*The size and locations of:* 

- 1) Rooms;
- 2) Doors;
- *3)* Windows;
- 4) Room use;
- 5) Structural features size, species and grade of lumber or other structural material for joists, beams, rafters, trusses, headers, studs, and columns; strength, thickness, and reinforcement (if any) of concrete for footings, foundations, floors and any other concrete work; height and thickness of concrete and/or masonry construction;
- Exit passageways (hallways) and stairs (including all stair dimensions

   riser height, tread width, stair width, headroom and handrail heights);
- 7) Plumbing fixtures (bathroom, kitchen, etc.) lavatory, water closet, water heater, softener, etc.;
- 8) Chimney(s) include also the type of construction (masonry or factory built) and rating, if metal;
- 9) Heating equipment;
- 10) Cooling equipment (central air conditioning, if provided);
- 11) Attic and crawl space access; and
- 12) Fire separation between dwelling and garage.
- 3. Elevation drawings which show:
  - A. Information on exterior appearance; and
  - B. Indicate the location, size and configuration of doors, windows, roof, chimneys and exterior grade level.
- 4. Cross-sectional drawing which shows:

- A. Exterior grade level;
- B. Footing and foundation wall sizes, drain tile system and types of materials;
- C. Exterior wall construction identifying materials used (including insulation and vapor barrier);
- D. Roof construction identifying materials used and spans (including insulation and vapor barrier); and
- E. Floor construction identifying materials used and spans (including insulation, if used).
- 5. Any additional information to help determine compliance with the code, such as: (Optional at inspector's request.)
  - A. Location of electrical outlets, lights, switches, main distribution panel and smoke detectors;
  - B. Manufacturer's name, model number, and input/output rating of heating appliance(s). Also include cooling appliance if central air is installed;
  - C. Size and location of ventilation openings for attics and crawlspaces (can be shown on floor plans or elevation plans);
  - D. Location of any exhaust fans to be installed;
  - E. Plumbing isometric plan; or
  - *F. Licensed plumber's license number.*
- 6. One Department of Commerce-approved Energy Worksheet, filled out completely, must be submitted.

#### Building Permit Checklist - Site-Work for Manufactured Dwellings

This is a checklist for submitting drawings and information when making application for a Wisconsin Uniform Building Permit for the site work for a manufactured dwelling.

Drawings must be legible and drawn to scale or dimensioned and include:

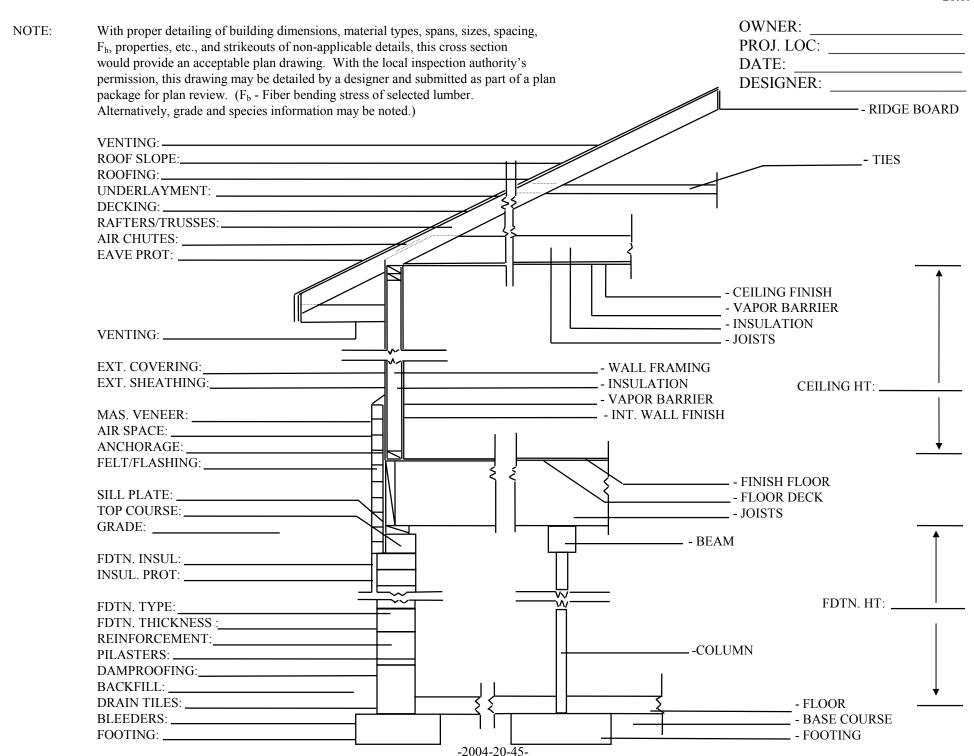
1. A plot plan showing the location of the dwelling and any other buildings, wells and disposal systems on the property with respect to property lines. For rural areas, include directions for locating dwelling.

As of December 1, 1992, plot plans also require erosion control procedures to be identified on the plot plan as well as the slope categories as indicated in Comm 20.09 (4)(a) 1.b.

#### 2. Floor Plans:

- A. General floor plans of manufactured dwelling indicating size and model number.
- B. Footing and foundation (basement) plan showing the size and locations of:
  - 1) Rooms;
  - 2) Doors;
  - *3)* Windows;
  - 4) Room use;
  - 5) Structural features size, species and grade of lumber or other structural material for beams, headers, studs, and columns; strength, thickness, and reinforcement (if any) of concrete for footings, foundations, floors and any other concrete work; height and thickness of concrete and/or masonry construction;
  - 6) Exit passageways (hallways) and stairs (including all stair dimensions riser height, tread width, stair width, headroom and handrail heights);
  - 7) Plumbing fixtures (if any, such as laundry trays, lavatory, water closet, water heater, softener, floor drains, etc.);
  - 8) Chimney(s) include also the type of construction (masonry or factory built) and rating, if metal;
  - 9) Heating equipment;
  - 10) Cooling equipment (central air conditioning, if provided);
  - 11) Crawlspace access; and
  - 12) Fire separation between dwelling and garage.
- C. Floor plans and construction drawings for site-built additions to the manufactured dwelling, such as:
  - 1) Attached garages, porches, decks, etc.; or
  - 2) Drawings or description of construction to be completed at the site for the manufactured dwelling, such as finishing drywall, siding, kitchen cabinets, etc.
- 3. Elevation drawings which show:
  - A. Information on exterior appearance; and

- B. Indicate the location of doors, windows, chimneys and exterior grade level, as they relate to the site-built portion of the dwelling.
- 4. Cross-sectional drawing which shows:
  - A. Exterior grade level; and
  - B. Footing and foundation wall sizes, drain tile system and types of materials;
  - C. Exterior wall construction identifying materials used (including insulation and vapor barrier);
  - D. Anchorage of manufactured dwelling to foundation, beams, walls, etc.; and
  - *E. Amount and type of any field-installed insulation.*
- 5. Any additional information to help determine compliance with the code, such as: (Optional by inspector's request.)
  - A. Location of electrical appliances, outlets, lights, switches, main distribution panel;
  - B. Manufacturer's name, model number, and input/output rating of heating appliance(s). Also include cooling appliance if central air is installed;
  - C. Size and location of ventilation openings for crawlspaces (can be shown on floor plans or elevation plans);
  - D. Location of utilities, such as sewer, water, gas and electric;
  - E. Plumbing isometric plan;
  - F. Licensed plumber's license number for site work; or
  - G. Number of the "Wisconsin Insignia" which should be affixed to any Department of Commerce-approved manufactured dwelling.
- 6. One Department of Commerce-approved Energy Worksheet, filled out completely, must be submitted.



- (c) Master plans. Where a dwelling is intended to be identically and repetitively constructed at different locations, a master plan may be submitted for approval. The plans shall include floor plans, elevations and data as required in par. (a) 2. and 3. If the plans conform to the provisions of the code, an approval and a master plan number shall be issued. The number issued may be used in lieu of submitting building plans for each location. A plot plan shall be submitted for each location at the time of application for the Wisconsin uniform building permit.
- (5) APPROVAL OF PLANS AND ISSUANCE OF PERMITS. (a) Plan approval. If the department, or the municipality administering and enforcing the code, determines that the plans, including the plans indicating the erosion control procedures as specified in sub. (4), submitted for a one- or 2-family dwelling substantially conform to the provisions of this code and other legal requirements, an approval shall be issued. The plans shall be stamped "conditionally approved" by a certified inspector or certified independent inspection agency. One copy shall be returned to the applicant; one copy shall be retained by the department or the municipality administering and enforcing the code. The conditions of approval shall be indicated by a letter or on the permit. All conditions of the approval shall be met during construction.

## Approval of Plans and Issuance of Permits

Please note that per this section, plans must be reviewed and approved by a Department of Commerce-certified inspector. Applications are available from the Credentialing Unit with instructions on becoming certified.

"Substantial conformance" of the plans to the code is a determination to be made by the plan examiner. If the noncode-complying items found can be corrected without major structural or design revision, the plans may be stamped "Conditionally Approved." Any noted conditions that must be met in order for the building to comply must be indicated in writing on either the Permit Application or by letter to the permit applicant.

Should the plan examiner (or inspector) miss any items that do not comply with the code at the time of permit issuance, the owner must correct the omitted item if the noncompliance is discovered at a later date.

The Wisconsin Uniform Building Permit card is issued only after the plans have been approved. The information contained on the building permit card is obtained from the application. The Wisconsin Building Permit Seal is affixed or its number recorded on the permit card at this time. The number is also recorded or affixed on the application form. Only one permit seal is ever assigned for a dwelling despite any subsequent additions or alterations. A permit seal is issued regardless if it is a site-built or premanufactured dwelling.

#### Sanitary Permits

Question: Does the UDC require that a sanitary permit or other documentation be issued for

homes in unsewered areas prior to issuing a uniform building permit for

construction, alterations or additions?

Answer: The UDC itself does not require a sanitary permit as a precondition to a building permit. However s. 66.036 Wis. Stats., and other plumbing statutes would

supersede the UDC in this matter. Section 66.036, Stats., prohibits issuance of building permits (including permits to start) by counties, cities, towns or villages for structures requiring connection to a private sewage treatment and disposal system unless such system satisfies all applicable requirements and all necessary permits for such systems have been obtained. A concern here is the determination of whether an existing septic system "satisfies all applicable requirements" of the codes. Typically, the county sanitary inspector would be the person to contact for such a determination. The system's capacity, operating condition and the maintenance of the required setbacks are considered by the county inspector.

Related to this question is the need to get proper zoning or floodplain authorization for a dwelling. This would typically come from the local municipality and sometimes the county, especially in smaller municipalities. Also, some counties require well permits to be obtained prior to drilling.

## Department of Commerce Plan Review

PROCEDURE TO BE USED WHEN THE DEPARTMENT OF COMMERCE PERFORMS PLAN REVIEW FOR MUNICIPALITIES WHICH HAVE ADOPTED THE UDC

Some municipalities have been referring builders and owners directly to the Department of Commerce for plan reviews of innovative dwellings such as geodesic domes, underground dwellings and other nonconventional structures.

The department recognizes that review of these dwelling plans may require expertise beyond that of the local certified building inspector. Therefore, a local inspector may not be comfortable in approving plans for innovative dwellings. If so, he/she may use the following procedure:

- 1. The municipal inspector should inform the builder of the difficult nature of the plans and that he/she intends to forward the plans to the Department of Commerce for review. The builder should also be informed that this review will require additional fees beyond the normal local plan review fee, payable to Department of Commerce.
- 2. The inspector (not the builder or owner) should send the permit application, complete plans and calculations, etc., to the department (Uniform Dwelling Code Unit) for approval or disapproval of the dwelling plans.

- 3. Per s. Comm 2.34(2)(a), the department assesses a plan review fee computed on the basis of \$60.00 per hour or \$120.00 per plan whichever is greater. This fee will be billed to the municipality since the Department of Commerce is performing the review for the local municipal inspector.
- 4. The UDC unit will review the submitted information for code compliance, make any notations of conditions of approval and return them with a fee invoice to the local building inspector. She/he then can issue a building permit, if appropriate, and conduct the necessary inspections. The local inspector shall collect the review fee from the builder, before the permit is issued, and forward the review fee to the Department of Commerce with the invoice return receipt.

This procedure is necessary to ensure that all parties are kept informed. This also eliminates any possibility of a builder or owner using the department against a local inspector and viceversa. This procedure shall apply in such situations whether the entire plan or only a component, such as structural, is submitted for review and approval. The department's position is to provide technical assistance to the local inspector when requested by the municipality having jurisdiction.

- (b) Issuance of permits. 1. Uniform building permit. a. The Wisconsin uniform building permit shall be issued if the requirements for filing and fees are satisfied and the plans have been conditionally approved.
- b. Pursuant to s. 101.65 (1m), Stats., a Wisconsin uniform building permit may not be issued to a person unless the person holds a credential issued by the department as a dwelling contractor financial responsibility regestration under s. Comm 5.31, except as provided under s. 101.654 (1)(b), Stats.

Note: Section 101.654 (1)(b), Stats., exempts an owner of a dwelling who resides or will reside in the dwelling and who applies for a building permit to perform work on the dwelling from obtaining a dwelling contractor financial responsibility registration.

- c. The permit shall expire 24 months after issuance if the dwelling exterior has not been completed.
- d. The municipality issuing the Wisconsin uniform building permit shall send a copy of the application to the department.

## Expiration of Permit

Question:

The code requires that a permit shall expire 24 months after issuance if the exterior is not completed. What happens in the case where the dwelling exterior has been completed within 24 months but construction may continue for several years or more before the building interior is completed?

Answer:

The 24-month period before the permit expires was set up so that there was a time limit on how long a permit was valid for building a dwelling's shell. Otherwise, s. Comm 20.04 merely requires that a completed or uncompleted dwelling conform to the code in effect at the time the permit is issued. In this case, the interior may continue to be completed under the code in effect at permit date. If alterations to the original plan approval occur, revised plans shall be submitted and reviewed under the current code. Occupancy may not be allowed if health or safety violations exist per s. Comm 20.10(1)(b)4a. & b..

Inspectors or other local officials may be able to invoke the raze and remove orders of s. 66.0413, Wis. Stats., in cases where a dwelling is a public hazard because construction has started and then ceased for more than two (2) years.

- 2. Permit to start construction of footings and foundation. Construction may begin on footings and foundations prior to the issuance of the Wisconsin uniform building permit where a permit to start construction is obtained. Upon submittal of the application for a permit to start construction, a plot plan as specified in sub. (4) (a) 1, complete footing and foundation information including exterior grading, and a fee, the department or the municipality enforcing this code may issue a permit to start construction of the footings and foundation. The issuance of a permit to start construction shall not influence the approval or denial of the Wisconsin uniform building permit application.
- 3. Pursuant to s. 145.195, Stats., if the proposed construction requires connection to a private onsite wastewater treatment system, a Wisconsin uniform building permit may not be issued unless conformance with s. Comm 83.25 (2) has first been determined.

Note: See appendix for a reprint of s. Comm 83.25 (2).

#### Permit to Start Construction of Footings and Foundation

If an application wishes to start construction of only the footings and foundations of a dwelling before the plans have been reviewed and approved, a Permit to Start Construction (Form SBDB-6072) may be issued. This permit allows construction to begin on the footing and foundation and erosion controls only. The applicant agrees to make any changes that may be required as a condition of plan approval while maintaining erosion control measures.

Subsequent nonfoundation work may not proceed until the building permit is issued.

(c) Posting of permit. The Wisconsin uniform building permit shall be posted in a conspicuous place at the dwelling site.

Note: Section 101.63 (7), Stats., requires the name and license number of the master plumber to be identified on the Wisconsin uniform building permit card.

- (6) DISAPPROVAL OF PLANS AND DENIAL OF PERMITS. If the department, or the municipality administering and enforcing the code, determines that the Wisconsin uniform building permit application or the plans, including the plans indicating the erosion control procedures as specified in sub. (4), do not substantially conform to the provisions of this code or other legal requirements are not met, approval shall be denied.
- (a) Denial of application. A copy of the "denied" application, accompanied by a written statement specifying the reasons for denial, shall be sent to the applicant and to the owner as specified on the Wisconsin uniform building permit application.
- (b) Stamping of plans. Plans which do not substantially conform to the provisions of the code shall be stamped "not approved." One copy shall be returned to the person applying for the Wisconsin uniform building permit; one copy shall be retained by the department or the municipality administering and enforcing the code.
- (c) Appeals. The applicant may appeal a denial of the application in accordance with the procedure outlined in s. Comm 20.21.

## <u>Disapproval of Plans and Denial of Permits</u>

Plans submitted may be stamped "Not Approved" if the plans do not substantially conform to the code requirements. When plans are "Not Approved," the applicant and the owner must be notified in writing of the reasons. The written notice shall give specific reasons (code violatins cited) for the denial.

(7) ACTION TO APPROVE OR DENY. Action to approve or deny a uniform building permit application shall be completed within 10 business days of receipt of all forms, fees, plans and documents required to process the application, and completion of other local prerequisite permitting requirements.

## Action to Approve or Deny

The plan examiner must notify the applicant in writing within ten (10) business days that the plans have been:

- 1. Conditionally approved
- 2. Approval withheld pending receipt of additional information. In this case, the code required time period to take action to approve or deny begins anew.
- 3. Not approved.
- 4. Sent to Department of Commerce for review.

If plan approval is being withheld pending additional information, the applicant must be informed in writing what the additional information required is.

The department strongly encourages municipalities to adopt a one-stop permit program for UDC requirements, as well as non-UDC requirements, so as to minimize the regulatory burden on permit applicants. This is not always possible due to staffing arrangement or delegation of erosion control authority to the county. However, the ten-day turnaround limit would apply at each submittal location after the necessary information has been submitted.

## Comm 20.10 Inspections.

All inspections, for the purpose of administering and enforcing this code, shall be performed by a certified inspector or certified independent inspection agency.

- (1) REQUIRED INSPECTIONS. Inspections shall be conducted by the department or the municipality administering and enforcing this code to ascertain whether or not the construction or installations conform to the conditionally approved plans, the Wisconsin uniform building permit application and the provisions of this code and shall notify the permit holder and the owner of any violations to be corrected.
- (a) Inspection notice. The applicant or an authorized representative shall, in writing or orally, request inspections of the department or the municipality administering and enforcing this code. The department, or the municipality administering and enforcing this code, shall perform the requested inspection within 2 business days after notification, except the final inspection. Construction shall not proceed beyond the point of inspection until the inspection has been completed. Construction may proceed if the inspection has not taken place within 2 business days of the notification, except if otherwise agreed between the applicant and the department or the municipality administering and enforcing the code.
- (b) Inspection types. The following sequence of inspections shall be performed for the purpose of determining if the work complies with this code:
- 1. Footing and foundation inspection. The excavation shall be inspected after the placement of forms, shoring and reinforcement, where required, and prior to the placement of footing materials. Where below-grade drain tiles, waterproofing or exterior insulation is required, the foundation shall be inspected prior to backfilling.
- 2. Rough inspection. A rough inspection shall be performed for each inspection category listed in subpars. a. through e. after the rough work is constructed but before it is concealed. All categories of work for rough inspections may be completed before the notice for inspection is provided. The applicant may request one rough inspection or individual rough inspections. A separate fee may be charged for each individual inspection.
  - a. General construction, including framing.
  - b. Rough electrical.

- c. Rough plumbing.
- d. Rough heating, ventilating and air conditioning.
- e. Basement drain tiles.
- 3. Insulation inspection. An inspection shall be made of the insulation and vapor retarder after they are installed but before they are concealed.
- 4. Final inspection. a. Except as provided under subd. 4. b., the dwelling may not be occupied until a final inspection has been made that finds no critical violations of this code that could reasonably be expected to affect the health or safety of a person using the dwelling.
- b. Occupancy may proceed in accordance with local ordinances if the inspection has not been completed within 5 business days after notification or as otherwise agreed between the applicant and the department or municipality.
- 5. Erosion control inspection. Erosion control inspections shall be performed concurrently with all other required construction inspections. Additional inspections for erosion control may be performed by the delegated authority.
- (c) Notice of compliance or noncompliance. 1. General. Notice of compliance or noncompliance with this code shall be written on the building permit and posted at the job site. Upon finding of noncompliance, the department or the municipality enforcing this code shall notify the applicant of record and the owner, in writing, of the violations to be corrected. Except as specified in subd. 2, the department or municipality shall order all cited violations corrected within 30 days after written notification, unless an extension of time is granted under s. Comm 20.21.
- 2. Soil erosion control requirements. a. The department or municipality shall order all cited violations of erosion control requirements under s. Comm 21.125 (1) (a) to (c) and (e) to (f) corrected within 72 hours after notification and may issue a special order directing an immediate cessation of work for failure to comply with the corrective order. Work may continue when the conditions of the cessation orders have been met.

Note: The sediment cleanup requirements of s. Comm 21.125 (1) (d) have different time limits and are unaffected by the 72-hour notice provision.

- b. If written notification is delivered in person, the 72-hour compliance period shall begin at the time of delivery. If faxed or sent through the mail, the compliance period shall begin at the time the notification was received by the applicant of record.
- c. If verbal notification, in person or by telephone, is given prior to delivery of written notification, the 72-hour notification shall begin at the time of verbal notification. The written

notification shall then be delivered, in person or via mail or fax, to the applicant of record at their business address and shall include the date and time of verbal notification.

#### **Inspections**

State statute 101.66 and the Uniform Dwelling Code s. Comm 20.10, require that any inspections made for the purpose of administering and enforcing the Uniform Dwelling Code shall be performed by persons certified by the Department of Commerce. If a builder or designer suspects that an inspector(s) is not properly certified in one or more UDC categories of construction, HVAC, electrical or plumbing, you may request to see their certification card. The State UDC Program will also investigate such cases upon written complaint.

The reference in this section to certified inspection agency refers to an independent agency that has been retained by a municipality to enforce the UDC.

It should be remembered that municipalities can jointly exercise jurisdiction through the use of an independent inspection agency or by coordinating their inspectors. For example, Municipality "A" may contract with Municipality "B" for electrical inspections; and Municipality "B" may contract with Municipality "A" for heating inspections. Municipality "A" and "B" may also have arrangements for inspectors to cover for each other when on leave. This flexibility also makes it easier for municipalities to administer and enforce the code by allowing them to utilize many inspectors rather than only one inspector certified in every category. Although it may be to the municipalities' advantage to encourage inspectors to become certified in as many categories as possible, it is not always easy to find such persons.

By state Attorney General's opinion, the Department of Commerce is not liable for actions by inspectors it certifies.

#### On-Site Inspections of Manufactured Dwellings

The inspections shall follow the same procedure as the stick-built home. There shall be an inspection of the excavation, footing, foundation, below and above grade foundation insulation, and a final inspection. All of the rough inspections on the home itself will be made by certified inspectors in the plant. The municipality or agency performing on-site inspections will be responsible for inspecting the electrical, plumbing, structural and insulation systems installed at the site.

Although in-plant plumbing work may be done by nonlicensed workers under a Wisconsin Plumbing Products Approval, any on-site work and performance testing must be done by a Wisconsin-licensed plumber.

#### *Inspections*

This section of the code provides that where municipalities elect to administer and enforce this code, they must do so by ascertaining whether or not the construction conforms to the approved

plans. They ascertain this conformance through required inspections. Basically, the inspections are to ascertain whether the structure conforms to each of the following:

- 1. The approved plans;
- 2. The conditions of approval of the Uniform Building Permit; and
- *3. The provisions of the code.*

Note that the inspector may inspect for compliance with the approved plans that may include items that are above and beyond the minimum code requirements. If it is no longer desired to build the dwelling as originally designed and approved, the applicant should submit revised plans to the inspector for review and approval.

Occasionally, an inspector will discover a noncompliance that was missed on a prior inspection or plan review. The inspector clearly has authority to order correction. The use of checklists such as the critical item checklist at the end of the appendix of this commentary, will help to minimize this.

Because it is the responsibility of the enforcing authority to notify the permit holder and the owner of any violations to be corrected in writing, it is the department's recommendation that an inspection report form be used for this purpose. The municipality may use its own inspection forms or Department of Commerce Inspection Report and Notice of Noncompliance Form, (SBD-6025).

#### **Inspection Notice**

Note that the 2 business days notice of the UDC supercedes the 24-hour notice requirement of the Plumbing Code in s. Comm 82.21.

**Question**: Are there guidelines for inspectors that require them to be available during normal working hours?

Answer:

There are no specific guidelines regarding such availability. Section Comm 20.10 details the type of inspections required and notification of inspection responsibilities. It also requires the inspections to be conducted within two business days of notification. Nothing would require the inspector to be available at certain times of the day. From a practical standpoint, a municipality should develop a procedure to clarify how the builder may contact the inspector. It may also be a good idea for the inspector to formalize his or her hours of availability. There are some valid concerns about nonbusiness hour inspections including adequate daylight conditions, inspector access to the site, and contractor availability if a question should arise. Such concerns may be best addressed to the inspector or to his or her superior.

## **Inspection Types**

Depending on the number of inspectors involved, coordination of the trades and the type of construction, the number of separate inspections could vary from four to eleven. There may be additional inspections necessary due to callbacks regarding incomplete work or noncomplying conditions.

Prior to performing any inspections, it would be a good policy to review the approved plans. Particular notice should be given to any deviations or unusual conditions that may exist.

## Footing and Foundation Inspection

Depending on the type of footings and foundation, the number and timing of inspections varies as follows:

- Unreinforced concrete footings Inspected after pouring of concrete.
- Reinforced concrete footings Inspected after placement of forms and reinforcing and prior to pouring of concrete.
- Masonry or unreinforced concrete foundation Inspected after placement of materials. May be combined with the inspection of unreinforced concrete footings.
- Reinforced concrete foundation Inspected after placement of forms and reinforcement and prior to pouring of concrete.
- Wood Foundations Inspected after framing and sheathing and prior to the placement of gravel.
- Foundation drain tiles, dampproofing and exterior insulation (when required) Inspected prior to soil backfill. This may be combined with the inspection of masonry or unreinforced concrete foundations. The interior drain tiles and any under slab plumbing, electrical or heating work shall also be inspected prior to the pouring of the basement floor.

Depending on construction, it is possible that the footings and foundation could be inspected along with the rough inspections discussed below. Zoning setbacks are also commonly verified at the time of footing inspection.

## Rough Inspection

The important principle to remember is that all work must be inspected prior to concealment. It is possible that all of the construction trades are coordinated enough so that all the rough-in inspections can be accomplished during one inspection. However, it is unlikely that the insulation inspection can be done at the same time because the insulation normally conceals the other work. Also, the rough framing inspection is best done after the electrical and heating work is done so that notching and boring can be checked.

Occasionally, a contractor will not properly call for an inspection so that the inspector does not have the opportunity to verify compliance prior to concealment of some work. Possible options

that the municipality may consider are:

- removal of all covering work so a full inspection can be made,
- removal of representative section(s) of covering work as chosen by the inspector,
- alternative testing of materials,
- affidavits by witnesses verifying the original work, or
- noting of the permanent file, and possibly on the property deed, that compliance of certain items was not verified.

Selection of the option(s) is at the discretion of the municipality and should be done in consultation with the municipal legal counsel.

#### Rough Electrical

Section 101.865 of the Wisconsin Statutes requires that the utility furnishing the electrical current obtain proof that the wiring complies with these standards before furnishing the current. Proof must be a certificate furnished by the inspection department which may be the certified independent inspection agency or the municipality administering and enforcing this code. The electrical utilities will require a certificate of inspection prior to energizing the electrical services, be they temporary or permanent installations. If there is no certified agency or municipality, proof consists of an affidavit furnished by the contractor or other person doing the wiring.

## Rough Plumbing Inspections

There may be separate required inspections for the sewer and water laterals, underslab plumbing and the rest of the rough plumbing.

#### *Inside Drain Tile Inspection*

This section requires any required inside drain tile and related underslab aggregate to be inspected. It does not require the underslab vapor barrier to be inspected prior to pour.

#### Insulation

Generally, the insulation and vapor barrier are installed after all other rough inspections have been made so as to avoid displacement of the insulation by the heating, electrical or plumbing systems.

#### <u>Final Inspection-Inspector Certification</u>

A final inspection prior to occupancy requires inspections of the construction, HVAC, electrical and plumbing systems by an inspector or inspectors certified in all of those categories.

## Final Inspection-Health and Safety Items

Special attention should be given the words "health and safety" in this section. It is clearly not the intent of the Uniform Dwelling Code to prevent persons from moving into their homes where certain cosmetic items have not been completed. For example, unpainted rooms, uncompleted trim work, lack of carpeting, etc., would not prevent occupancy.

On the other hand, incomplete exiting arrangements, open electrical boxes, missing handrails and guardrails, open plumbing drains, etc., could constitute items affecting health and safety and would prevent occupancy.

Generally, we would discourage occupancy prior to installation of wall or ceiling board, i.e., drywall, rocklath, paneling, or other materials, that would protect the electrical wiring, plumbing and insulation systems. No wires or equipment shall be exposed so as to create a hazard to the safety of the occupant. All electrical receptacle outlets and lighting outlets shall have the receptacles with faceplates and fixtures installed. In the case of NM electrical cable, it must be covered or closely follow the surface of building finish.

Basic plumbing requirements for personal hygiene and culinary purposes that must be installed in the dwelling are a stool, wash basin, tub or shower, kitchen sink and hot water. All must be fastened in place and must be functional. This means water service and drain, waste and vent piping must be provided and operational. The wash basin, kitchen sink, tub or shower must have hot water connections and all unused sewer connections must be sealed.

#### Basement, Underground and Earth-Sheltered Dwellings

This section allows occupancy of a basement prior to the completion of the full dwelling if it would otherwise comply with the code. It also refers to any provisions dealing with underground dwellings. However, the code is silent regarding special provisions for underground dwellings other than the need to design for soil loads. Therefore, the following relevant general code provisions apply to basements as underground or earth-sheltered dwellings:

- s. 20.07(34K) Definition of first floor requires that there always be a first floor. Therefore, unless there is a substantially complete upstairs, the basement must be treated as the first floor.
- s. 21.03(1) Requires two exits from the first floor. Bedroom egress windows may qualify see (1) (f) 1.,2., or 3..
- s. 21.05(1) Requires natural light to all habitable rooms. The exception in s. 21.05(1)(a) for habitable rooms, other than bedrooms, in basements does <u>not</u> apply here. Skylights may be used to meet this requirement as may the exception in s. 21.05(1)(b) that allows borrowing of light between rooms.

- s. 21.05(2) Requires natural or mechanical ventilation for most rooms. Again openable skylights would be acceptable.
- s. 22.06/22.12 Requires compliance with envelope insulation requirements. The ceiling must be insulated per these sections and protected with a vapor barrier.

This is not a complete listing of applicable code requirements - just those in the UDC needing highlighting. The Electrical and Plumbing Codes must be complied with, including proper outlet placement and fixture venting. Also, the final inspection, per s. 20.10(1)(b)3., requires all health and safety items to be completed.

The intent of this code application to basement dwellings is to ensure that the basement will safely perform as a dwelling until and if the rest of the dwelling is completed.

## Occupancy Permit

**Question**: Under the UDC is an "occupancy permit" required?

Answer: The UDC does not describe or require an "occupancy permit" procedure. The

"occupancy permit" is a procedure used by municipalities. Wisconsin Statutes recognizes this in s. 62.23(9) and such a procedure would be in the local Building

Inspection Department's ordinances.

#### Notice of Compliance or Noncompliance

It is important to note that the enforcing authority must notify the <u>applicant and owner in writing</u> of any noncompliances in order to begin a legal enforcement action or to prevent occupancy. Oral orders or notes posted at the jobsite would have limited, if any, legal significance. The municipality enforcing this code may in fact wish to notify the applicant or owner by Registered Mail of violations.

Thirty days after notice, the inspector should refer uncorrected orders to the municipal legal counsel, who may initiate legal action as in s. Comm 20.22, Penalties & Violations, if corrections have not been made. Each day after the 30 days shall constitute a separate violation per s. 101.66 of the Wisconsin Statutes.

Form SBD-6025 "Inspection Report and Notice of Noncompliance" should be used to issue written notice unless the municipality has developed an alternate form. See the following example completed form for the necessary elements of a properly written "Inspection Report and Notice of Noncompliance." Note especially that a code section is always cited.

Municipalities may charge additional inspection fees as necessary to determine if noncompliances have been corrected.

This section also requires notice that no noncompliances were found so that contractors will

clearly know that they can proceed. This may be written on the permit card at the jobsite.

Municipal legal counsels have broad latitude in judging whether to pursue legal action against a noncomplying builder or owner. But this is the counsel's decision, not the inspector's, to make. The inspector should write the orders as he or she sees them.

(2) VOLUNTARY INSPECTION. The department or its authorized representative may, at the request of the owner or the lawful occupant, enter and inspect dwellings, subject to the provisions of this code, to ascertain compliance with this code.

## **Voluntary Inspection**

Because the state inspection staff has limited available time, the Department of Commerce normally refers homeowners and builders to independent inspectors when they are seeking a voluntary inspection of their house. They may be seeking inspection services because of lender requirements or to satisfy their own quality assurance concerns.

The fee for the inspection is negotiated between the inspector and builder or owner. A typical plan review and inspection process may take approximately 10 hours. The Department of Commerce currently charges a minimum of \$60.00/hr. plus expenses, with a minimum of \$120 per inspection per ch. Comm 2.

An inspector in this situation does not have municipal or state enforcement authority. Rather, he/she is providing a report which the owner or lender can use to pursue compliance and/or private litigation if necessary. Also, per state statute 101.02(11), an owner may withhold payment to a contractor that fails to comply with the UDC.

# INSPECTION REPORT AND NOTICE OF NONCOMPLIANCE

Report Date:		Inspection Date	Permit No.:	Parcel No:	Parcel No:						
Project Addre	ess		Subdivision	Lot No.:	Block No.:						
Ingraction	Footing	Erosion Control	Foundation	Bsmt Drain Tile	Construction						
Inspection Type(s)	Heat/Vent/AC	Plumbing	☐ Foundation ☐ Electrical	☐ Insulation/Energy	Occupancy						
Owner:			Contractors								
Owner:			Contractor:								
AN INSPEC	TION OF THE ABOVE PI	REMISES HAS DISCLOS	ED THE FOLLOWING	NONCOMPLIANCES:							
ORDER NO.	CODE SECTION		FINDINGS AND REQUIREMENTS								
	IMPORT.	ANT: Please report whe	en violations are correc	ted. AVOID DELAY							
	F NONCOMPLIANCE: A			lays after written notification ur							
	ed. Each day that the violation in the v			ense and is subject to remedies a	nd penalties by the						
Enforcement		County City		Authority By Municipal Ordin	ance Section::						
Jurisdiction:		State OF									
Inspector's Na	ame:	Violatio	ons Explained To:	Compliance Date:							
Inspector's A	ddress:	l	Office Hours:	Telephone No:	Telephone No:						
	Distribution	n: □Ply 1 - Contractor □1	Ply 2 - Inspector	- Owner Ply 4 - File							

## Comm 20.11 Suspension or revocation of Wisconsin uniform building permit.

The department, or the municipality administering and enforcing this code, may suspend or revoke any Wisconsin uniform building permit where it appears that the permit or approval was obtained through fraud or deceit, where the applicant has willfully refused to correct a violation order or where the inspector is denied access to the premises. No construction shall take place on the dwelling after suspension or revocation of the permit.

- (1) Any person aggrieved by a determination made by the municipality exercising jurisdiction may appeal the decision in accordance with s. Comm 20.21.
- (2) Any person aggrieved by a determination made by the department may appeal the decision in accordance with s. Comm 20.21.

## Suspension or Revocation of Wisconsin Uniform Building Permit

**Question**: Can a local building inspector issue a "stop work" order under the UDC?

Answer: The UDC does describe a "stop work" order in Comm 20.10(1)(c). The enactment

of 1991 Wisconsin Act 309 now gives stop work authority to the department, city, village, town or county for violations of erosion control requirements. This authority (State Statutes ss. 101.653 (7)(b)) is only for erosion and not extended to

other UDC requirements.

When the UDC is adopted by a municipality, it may use its ordinances for administrative procedures. Under state statute ss. 62.11(5) and 62.17, municipalities have broad powers to enforce ordinances. We are aware of many municipalities using "stop work" orders, also known as "red tagging" procedures.

Question: Comm 20.10. Does a local building inspector have the authority to enter a house,

without permission, where there is no building permit issued?

Answer: This might be better addressed by a municipality's legal staff. However the

Wisconsin Statutes in ss. 66.122 and 66.123 describe a building inspector as a "peace officer" and explains the purpose for which he/she may make inspections and the procedure to be used if refused entry. When a State Deputy is denied entry to a building to perform his/her duties, we request the Department of Justice to obtain an injunction for us to continue with our duties. In recent years the department has also used the inspection warrant procedure described in ss. 66.122

and 66.123 to perform its duties.

## Subchapter V — Approval and Inspection of Manufactured Dwellings and Their Components

#### Comm 20.12 Scope.

This part shall govern the design, manufacture, installation and inspection of manufactured dwellings, manufactured building systems and the components of the building systems displaying the Wisconsin insignia.

#### Overview

Most of this subchapter sets the procedures for manufacturers of dwellings to get their product approved by the state. These dwellings are typically of closed-panel construction that would be difficult to inspect at the installation site without removing finish materials. They may be of panelized or modular type construction. They are inspected in the plant by the Department of Commerce or a certified inspection agency. Strict compliance assurance procedures must be followed by the manufacturer and inspection agency.

Some of these procedures also apply to manufactured multi-unit residential buildings (Chapter 66) which are eligible for the insignia program through the Commercial Building Code. Comm 50.125 insignias for multifamily construction should be applied at the minimum rate of one per truckload of manufactured building material or a maximum of one per dwelling unit. Use of the insignia does not exempt the building from any required plan review or local requirements. The insignia may NOT be used for nonresidential buildings.

This should not be confused with manufactured homes (formerly called mobile homes) which are regulated by Federal Housing and Urban Development (HUD) rules. The state mobile home program, also in the Division of Safety and Buildings, is under contract with HUD to enforce the rules in Wisconsin.

For readers other than manufacturers, your attention is directed to ss. 20.13 and 20.15 which relate to on-site installation.

#### <u>Scope</u>

Again, the scope of these rules do not include manufactured (mobile) homes regulated by the federal government.

#### Comm 20.13 Manufacture, sale and installation of dwellings.

- (1) MANUFACTURE AND SALE. No manufactured dwelling, manufactured building system or component of the building system subject to this part shall be manufactured for use, sold for initial use or installed in this state unless it is approved by the department and it bears the Wisconsin insignia issued or a state seal or an insignia reciprocally recognized by the department.
- (2) INSTALLATION. A Wisconsin uniform building permit shall be obtained in accordance with the procedures outlined in s. Comm 20.09 (1), (2), (3) and (4) (a) 1. before any on-site construction falling within the scope of this code is commenced for a manufactured dwelling. The permit shall be issued in accordance with s. Comm 20.09 (5) (b) 1.

#### Manufacture and Sale

An approved Wisconsin manufactured dwelling must display a Wisconsin Insignia to indicate that the manufactured portion of the unit has been constructed and inspected in compliance with the Uniform Dwelling Code.

Typical locations are on the electrical service box, under the kitchen sink, in the bathroom vanity or in a closet. Following is a sample of an insignia.

Each unit is also required to bear a manufacturer's data plate (see s. 20.14(6)(e)). The data plate indicates the equipment furnished with the unit design loads and testing. This information should be reviewed and compared with site requirements. If required testing has not been performed in the plant, the system should be tested on site. The data plate also indicates the unit serial number. This number and the Wisconsin insignia number are necessary to track production records if a problem or question should arise.



Insignia Color is Red

In addition, the Department of Commerce is allowed to enter into reciprocity arrangements with other states (see s. 20.14(7)).

#### Installation

On-site work for manufactured dwellings such as foundations, basements, heating systems, electrical systems, plumbing systems, and additions are subject to the same plan submittal and inspection requirements as site-built dwellings. This includes permit procedures and permit seal issuance. See s. 20.09 (4) (a) of this commentary for a plan submittal checklist for on-site work for manufactured dwellings.

Installation and connection details should be checked for conformance to the manufacturer's instructions. The installer is required to furnish the inspector with installation instructions upon request.

Any damage to the manufactured portion of the dwelling as a result of transporting or on-site handling should also be investigated by the inspector. Any questions regarding the repair should be directed to the manufacturer and the inspection agency. Major repairs or modifications may require on-site inspection by the manufacturer's inspection agency to ensure compliance with the approved building system.

# MANUFACTURED DWELLINGS BUILT UNDER WISCONSIN ADMINISTRATIVE CODE UNIFORM DWELLING CODE (UDC) CHAPTERS 20 through 25

#### Typical Manufactured Dwellings:

- 1. Will have a Wisconsin Insignia.
- 2. Will not have a HUD Seal. (Typically on "Manufactured Homes" formerly called Mobile Homes) Regulated by the Federal Government.
- 3. Can be modular or closed panel construction.
- 4. Generally have closed wall construction not available for local inspection.
- E3 Solutions
   aka Advanced Laminated Housing Structures
   52400 State Rd 15 North
   P.O. Box 70
   Bristol IN 46507
   (219) 848-9504
- All American Homes
   551 15th Ave., S.E.
   P.O. Box 219
   Dyersville, IA 52040-0219
   (319) 587-2421

Commodore Homes
 1423 Lincolnway East
 P.O. Box 729
 Goshen IN 46528
 (574) 534-6307

4. Contempri Industries 1000 W. Water Street P. O. Box 69 Pinckneyville, IL 62274 (574) 534-6307

Crest Homes
 221 U.S. 20, West
 P.O. Box 1218
 Middlebury, IN 46540
 (219) 825-5881

6. CSI Homes P.O. Box 138 Cambridge, IL 61238 (309) 937-5544

Design Homes
 600 N. Marquette Rd.
 P.O. Box 239
 Prairie du Chien, WI 53821
 (608) 326-6041

8. Dickinson Homes 1500 W. Breitung Ave. P.O. Box 2245 Kingsford, MI 49802-2245 (906) 774-5800

- 9. Fuqua Homes, Inc 2405 Industrial Drive Boonville MO 65233 (660) 882-3411
- 11. Indiana Building Systems 51700 Lovejoy Drive Middlebury IN 46540 (574) 825-4206
- 13. Manufactured Housing Enterprises 09302 State Road 6 Bryan OH 43506 (419) 636-4511
- Norse Building Systems
   1100 Barnett Rd.
   Ladysmith, WI 54425
   (715) 532-0600
- 18. Pariot Homes dba Energymate Homes 57420 C.R. 3 South Elkhart IN 46517 (219) 293-6507
- Redman Homes
   308 Sheridan Drive
   Topeka, IN 46571
   (219) 593-2962
- Rochester Homes
   1345 Lucas Street
   P.O. Box 587
   Rochester, IN 46975
   (219) 223-4321
- 24. Showcase Homes P.O. Box 489 Nappanee, IN 46550 (219) 773-4616
- Star Line LLC
   2081 South 56<sup>th</sup> Street
   West Allis WI 53219
   (414) 545-4238

- 10. Hi-Tech Housing Inc.19319 C.R. 8Bristol IN 46507(574) 848-5593
- Liberty Homes dba Dorchester Homes & Badger Built Homes 337 Liberty Drive P.O. Box 110 Dorchester, WI 54425 (715) 654-5021
- 14. New Era Building Systems451 Southern Ave.Stratton, PA 16258(814) 764-5581
- North American Homes
  600 Marquette Road
  P.O. Box 239
  Prairie du Chien, WI 53821
  (608) 326-6338
- 19. Pittsville Homes
  Box C, Highway 80, South
  Pittsville, WI 54446
  (715) 884-2511
- 21. Ritz-Craft Corporation of MI 118 Deal Parkway, P.O. Box 5 Jonesville, MI 49250 (570) 966-5136
- Skyline Homes
   Hwy 61 N.E.
   P.O. Box 590
   Lancaster WI 53813-0590
   (608) 723-4171
- 25. Shamrock Homes 1201 W. Markley Rd Plymouth IN 46563 (219) 935-5111
- 27. Stratford Homes P.O. Box 37 Stratford, WI 54484 (715) 687-3133

- 28. Stratton Homes 1000 First Street Chariton IA 50049 (715) 687-3133
- 30. Terrace Homes 1553 11<sup>th</sup> Drive Friendship, WI 53934 (608) 339-7888
- 32. Wick Homes-Mazomanie 400 Walter Rd. P.O. Box 188 Mazomanie, WI 53560 (608) 795-2261
- 34. Wisconsin Homes
   425 W. McMillan St.
   Marshfield, WI 54449
   (715) 384-2161

- Stratton Homes
   One Mauro Ave.
   P.O. Box 665
   Knox, PA 16232
   (914) 797-1115
- 31. Wausau Homes P.O. Box 8005 Wausau, WI 54401-8005 (715) 359-7272
- Wick Homes-Marshfield
   230 E. Fourth St.
   P.O. Box 530
   Marshfield, WI 54449
   (715) 387-2551

#### Approval Agencies

PFS Corporation (608) 221-3361 2402 Daniels St.

Madison WI 53704

NTA, Inc (219) 773-7975

P.O. Box 490

Nappanee IN 46550-0490

T.R. Arnold & Associates (574) 264-0745

700 E. Beardsley Ave.

Elkhart IN 46515

Underwriters Laboratories (847) 664-2264

Northbrook Division 333 Pfingsten Road Northbrook IL 60062-2096

This list subject to change as approved manufacturers are added or deleted.

# Comm 20.14 Approval procedures.

(1) Application for approval. An application for the approval of any manufactured dwelling, building system or component shall be submitted to the department, in the form required by the department, along with the appropriate fees in accordance with s. Comm 2.34. The department shall review and make a determination on an application for approval of a manufactured dwelling within 3 months of receipt of all forms, fees, plans and documents required to complete the review.

- (2) APPROVAL OF BUILDING SYSTEMS AND COMPONENTS. (a) Approval of building systems. 1. Plans and specifications. All plans and specifications shall be submitted to the department according to subpar. a. or b.:
- a. Three complete sets of building, structural, mechanical and electrical plans, (including elevations, sections and details), specifications and calculations shall be submitted to the department on behalf of the manufacturer for examination and approval.
- b. At least one complete set of building, structural, mechanical and electrical plans, (including elevations, sections and details), specifications and calculations shall be submitted to the department on behalf of a manufacturer by an independent inspection/evaluation agency certified under s. Comm 26.14. All plans and specifications submitted to the department shall be stamped "conditionally approved" by the independent inspection/evaluation agency.
- 2. Compliance assurance program. Three sets of the compliance assurance program shall be submitted for examination and approval. The compliance assurance program submitted to the department on behalf of the manufacturer shall meet the standards of the Model Documents for the Evaluation, Approval, and Inspection of Manufactured Buildings as adopted under s. Comm 20.24 (8) or equivalent as determined by the department.
- (b) Approval of building components. 1. Plans and specifications. All plans and specifications shall be submitted to the department according to subpar. a. or b.:
- a. At least 3 complete sets of plans and specifications for manufactured dwelling building components shall be submitted to the department on behalf of the manufacturer for examination and approval.
- b. At least one complete set of plans and specifications for manufactured dwelling building components shall be submitted to the department on behalf of the manufacturer by an independent inspection/evaluation agency certified as required in s. Comm 26.14. All plans and specifications submitted to the department shall be stamped "conditionally approved" by the independent inspection/evaluation agency.
- 2. Compliance assurance program. Three sets of the compliance assurance program shall be submitted to the department on behalf of the manufacturer for examination and approval of components. The compliance assurance program shall meet the requirements established by the department or, where applicable, be in the form of the NBS "Model Rules and Regulations" [Comm 20.24 (3)].
- (3) NOTIFICATION OF APPROVAL OR DENIAL OF PLANS, SPECIFICATIONS AND COMPLIANCE ASSURANCE PROGRAM. (a) Conditional approval. If the department determines that the plans, specifications, compliance assurance program and application for approval submitted for such building system or component substantially conform to the provisions of this code, a conditional approval shall be issued. A conditional approval issued by

the department shall not constitute an assumption of any liability for the design or construction of the manufactured building.

- 1. Written notice. The conditional approval shall be in writing and sent to the manufacturer and the person submitting the application for approval. Any noncompliance specified in the conditional approval shall be corrected before the manufacture, sale or installation of the dwelling, building system or component.
- 2. Stamping of plans, specifications and compliance assurance program. Approved plans, specifications and compliance assurance programs shall be stamped "conditionally approved." At least 2 copies shall be returned to the person designated on the application for approval; one copy shall be retained by the department.
- (b) Denial. If the department determines that the plans, specifications, compliance assurance program or the application for approval do not substantially conform to the provisions of this code, the application for approval shall be denied.
- 1. Written notice. The denial shall be in writing and sent to the manufacturer and the person submitting the application for approval. The notice shall state the reasons for denial.
- 2. Stamping of plans, specifications and compliance assurance program. Plans, specifications and compliance assurance programs shall be stamped "not approved." At least 2 copies shall be returned to the person submitting the application for approval; one copy shall be retained by the department.
- (4) EVIDENCE OF APPROVAL. The manufacturer shall keep at each manufacturing plant where such building system or component is manufactured, one set of plans, specifications and compliance assurance program bearing the stamp of conditional approval. The conditionally approved plans, specifications and compliance assurance program shall be available for inspection by an authorized representative of the department during normal working hours.
- (5) INSPECTIONS. Manufacturers shall contract with the department or an independent inspection agency to conduct in-plant inspections to assure that the building system and components manufactured are in compliance with the plans, specifications and the compliance assurance program approved by the department. All inspections, for the purpose of administering and enforcing this code, shall be performed by a certified inspector or certified independent inspection agency.
- (6) WISCONSIN INSIGNIA. Upon departmental approval of the plans, specifications and compliance assurance program, and satisfactory in-plant inspections of the building system and components, Wisconsin insignias shall be purchased from the department in accordance with the fee established in s. Comm 2.34. A manufacturer shall be entitled to display the Wisconsin insignia on any approved system or component.

- (a) Lost or damaged insignia. 1. Notification. If Wisconsin insignias become lost or damaged, the department shall be notified immediately, in writing, by the manufacturer or dealer.
- 2. Return of damaged insignias. If Wisconsin insignias become damaged, the insignia shall be returned to the department with the appropriate fee to obtain a new insignia.
- (b) Affixing Wisconsin insignias. Each Wisconsin insignia shall be assigned and affixed to a specific manufactured dwelling or component in the manner approved by the department before the dwelling is shipped from the manufacturing plant.
- (c) Insignia records. 1. Manufacturer's insignia records. The manufacturer shall keep permanent records regarding the handling of all Wisconsin insignias, including construction compliance certificates, indicating the number of Wisconsin insignias which have been affixed to manufactured dwellings or manufactured building components (or groups of components); which Wisconsin insignias have been applied to which manufactured dwelling or manufactured building component; the disposition of any damaged or rejected Wisconsin insignias; and the location and custody of all unused Wisconsin insignias. The records shall be maintained by the manufacturer or by the independent inspection agency for at least 10 years. A copy of the records shall be sent to the department upon request.
- 2. Construction compliance certificate. Within 30 days after receiving the original Wisconsin insignias from the department, and at the end of each month thereafter, the manufacturer shall submit a construction compliance certificate, in the form determined by the department, for each manufactured dwelling intended for sale, use or installation in the state.
- (d) Unit identification. Each manufactured dwelling and major transportable section or component shall be assigned a serial number. The serial number shall be located on the manufacturer's data plate.
- (e) Manufacturer's data plate. The manufacturer's data plate for building systems shall contain the following information, where applicable:
  - 1. Manufacturer's name and address;
  - 2. Date of manufacture;
  - 3. Serial number of unit;
  - 4. Model designation;
- 5. Identification of type of gas required for appliances and directions for water and drain connections;
  - 6. Identification of date of the codes or standards complied with;

- 7. State insignia number;
- 8. Design loads;
- 9. Special conditions or limitations of unit;
- 10. Electrical ratings; instructions and warnings on voltage, phase, size and connections of units and grounding requirements.

# <u>Approval Procedures</u>

The Department of Commerce's UDC Program has an informational and submittal packet available for dwelling manufacturers interested in our manufactured dwelling program. Information is available at the following web-site http://commerce.wi.gov/SB/SB-ManufacturedMobileHomesProgram.html

(7) RECIPROCITY. Upon request, the department will make available to any person a list of those states whose dwelling codes are considered equal to the codes established by the department and whose products are accepted reciprocally by Wisconsin.

## <u>Reciprocity</u>

Other states may have manufactured dwelling approval and inspection programs equivalent to Wisconsin's. If a reciprocity agreement is in effect the states will accept dwellings approved, inspected and provided with an insignia of the state of manufacture. The dwelling must be inspected to conform to the code of the state where it will be located. Wisconsin currently has a reciprocity agreement with Minnesota and thus recognizes dwellings bearing the "IBC" or 'Industrialized Building Commission' labels.

#### Comm 20.15 Effect of approval.

- (1) RIGHT TO BEAR INSIGNIA. A manufactured dwelling or building component approved by the department, manufactured and inspected in accordance with this code, shall be entitled to bear the Wisconsin insignia.
- (2) EFFECT OF INSIGNIA. Manufactured dwellings and manufactured building components bearing the Wisconsin insignia are deemed to comply with this code, except as to installation site requirements, regardless of the provisions of any other ordinance, rule, regulation or requirement.

#### Effect of Insignia

A dwelling bearing a Wisconsin Insignia is presumed to be code complying. A local building inspector may not require the opening up of closed walls or other components coming from the

plant. However, if noncompliances are otherwise noted, they should be cited by the inspector. The Department of Commerce should be notified for further investigation at the manufacturing plant.

(3) Right to install. Manufactured dwellings and components bearing the Wisconsin insignia may be manufactured, offered for sale and shall be entitled to be installed anywhere in Wisconsin where the installation site complies with the other provisions of this code.

## Right to Install

A dwelling bearing a Wisconsin Insignia must be accepted by a municipality as would a site-built home. It would be subject to any zoning requirements.

#### Comm 20.16 Suspension and revocation of approval.

The department shall suspend or revoke its approval of a manufactured building system or manufactured building component if it determines that the standards for construction or the manufacture and installation of a manufactured building system or manufactured building component do not meet this code or that such standards are not being enforced as required by this code. The procedure for suspension and revocation of approval shall be as follows:

- (1) FILING OF COMPLAINT. Proceedings to suspend or revoke an approval shall be initiated by the department or an independent inspection agency having a contract with the manufacturer whose approval is sought to be suspended or revoked. Initiation shall be by a signed, written complaint filed with the department. Any alleged violation of the code shall be set forth in the complaint with particular reference to time, place and circumstance.
- (2) INVESTIGATION AND NOTIFICATION. The department may investigate alleged violations on its own initiative or upon the filing of a complaint. If it is determined that no further action is warranted, the department shall notify the persons affected. If the department determines that there is probable cause, it shall order a hearing and notify the persons affected.
- (3) MAILING. Unless otherwise provided by law, all orders, notices and other papers may be served by the department by certified mail to the persons affected at their last known address. If the service is refused, service may be made by sheriff without amendment of the original order, notice or other paper.
- (4) RESPONSE. Upon receipt of notification of hearing from the department, the person charged with noncompliance or nonenforcement may submit to the department a written response within 30 days of the date of service. If the person charged files a timely written response, such person shall thereafter be referred to as the respondent.
- (5) CONCILIATION AGREEMENT PRIOR TO HEARING. If the department and the respondent are able to reach agreement on disposition of a complaint prior to hearing, such agreement shall:

- (a) Be transmitted in writing to the secretary;
- (b) Not be binding upon any party until signed by all parties and accepted by the secretary;
- (c) Not be considered a waiver of any defense nor an admission of any fact until accepted by the secretary.
- (6) HEARINGS. (a) Subpoenas; witness fees. Subpoenas shall be signed and issued by the department or the clerk of any court of record. Witness fees and mileage of witnesses subpoenaed on behalf of the department shall be paid at the rate prescribed for witnesses in circuit court.
- (b) Conduct of hearings. All hearings shall be conducted by persons selected by the department. Persons so designated may administer oaths or affirmations and may grant continuances and adjournments for cause shown. The respondent shall appear in person and may be represented by an attorney-at-law. Witnesses may be examined by persons designated by all parties.
- (7) FINDINGS. The department shall make findings and enter its order within 14 days of the hearing. Any findings as a result of petition or hearing shall be in writing and shall be binding unless appealed to the secretary.
- (8) APPEAL ARGUMENTS. Appeal arguments shall be submitted to the department in writing in accordance with ch. 227, Stats., unless otherwise ordered. The department shall review and make a determination on an appeal of notification of suspension or revocation of approval within 45 business days of receipt of the appeal.

#### Comm 20.17 Effect of suspension and revocation.

- (1) BEARING OF INSIGNIA. Upon suspension or revocation by the department of the approval of any manufactured dwelling or manufactured building component, no further insignia shall be attached to any dwelling or building component manufactured with respect to which the approval was suspended or revoked. Upon termination of such suspension or revocation, insignias may again be attached to the dwelling or building component manufactured after the date approval is reinstated. Should any dwelling or building component have been manufactured during the period of suspension or revocation, it shall not be entitled to bear the Wisconsin insignia unless the department has inspected, or caused to be inspected, such manufactured dwelling or manufactured building component and is satisfied that all requirements for certification have been met.
- (2) RETURN OF INSIGNIAS. The manufacturer shall return to the department all insignias allocated for a manufactured dwelling or manufactured building component no later than 30 days from the effective date of any suspension or revocation of the approval by the department. The manufacturer shall also return to the department all insignias which it determines for any reason are no longer needed.

### Subchapter VI — Approval of Materials

## **Comm 20.18 Building Product Approvals.**

- (1) VOLUNTARY APPROVAL. (a) Materials, equipment and products regulated by this code may receive a written approval from the department indicating code compliance.
- (b) 1. Approval of materials, equipment and products shall be based on sufficient data, tests and other evidence that prove the material, equipment or product is in compliance with the standards specified in this code.
- 2. Tests, compilation of data, and calculations for materials, equipment and products shall be conducted by a qualified independent third party.
- (2) ALTERNATE APPROVAL. (a) Materials, equipment and products which meet the intent of this code and which are not approved under sub. (1) shall be permitted if approved in writing by the department.
- (b) 1. Approval of materials, equipment and products shall be based on sufficient data, tests and other evidence that prove the material, equipment or product meets the intent of the standards specified in this code.
- 2. Tests, compilation of data, and calculations for materials, equipment and products shall be conducted by a qualified independent third party.
- (3) EXPERIMENTAL APPROVAL. (a) The department may allow use of an experimental material, equipment or product for the purpose of proving compliance with the intent of this code.
- (b) The department may require the submission of any information deemed necessary for review.
- (c) The department may limit the number of applications it will accept for approval of experimental materials, equipment or products.
- (d) Installations of a material, equipment or product under an experimental approval shall comply with all of the following:
- 1. Plans detailing the installation for each project where the experimental material, equipment or product is to be used shall be submitted to the department.
- 2. A copy of the experimental approval shall be attached to the submitted plans and approved plans.

- 3. a. A letter of consent from the owner of the installation shall be attached to the submitted plans and approved plans.
- b. The letter under subpar. a. shall acknowledge that the owner has received and read a copy of the experimental approval and is in compliance with all conditions of the approval.
- 4. A person responsible for construction of the project shall be designated in writing by the owner.
- 5. The person designated as responsible for the construction of the project shall, upon completion of construction, certify in writing to the department that the installation is in compliance with the experimental approval, approved plans, specifications and data.
- (e) 1. Any onsite inspections shall be performed by the department, or other person authorized by the department, at time intervals as specified by the department, but not less than once a year. The inspector shall write an inspection report.
  - 2. The department may assess a fee for each inspection conducted under subd. 1.
- (f) Five years and 6 months after the date of the completed installation, the department shall order the removal of the experimental material, equipment or product, or issue an approval for the material, equipment or product.
- (g) Paragraphs (e) and (f) do not apply to an experimental system if this code is revised to include or enable the experimental system to conform to the intent of this code.
- (4) REVIEW, APPROVAL AND REVOCATION PROCESSES. (a) 1. Upon receipt of a fee and a written request, the department may issue an approval for a material, equipment or product.
- 2. The department shall review and make a determination on an application for approval after receipt of all forms, fees, plans and information required to complete the review.
- 3. For voluntary and alternate approvals, a determination shall be made within 40 business days of receipt of all required materials.
- 4. For an experimental approval, a determination shall be made within 6 months of receipt of all required materials.
- (b) 1. The department may include specific conditions in issuing an approval, including an expiration date for the approval.
- 2. Violations of the conditions under which an approval is issued shall constitute a violation of this code.

- (c) If the department determines that the material, equipment or product does not comply with this code or the intent of this code, or that an experimental approval will not be issued, the request for approval shall be denied in writing.
- (d) If an approved material, equipment or product is modified, the approval shall be considered null and void, unless the material, equipment or product is resubmitted to the department for review and approval is granted.
- (e) 1. The department may revoke or deny an approval of a material, equipment or product for any false statements or misrepresentations of relevant facts or data, unacceptability of a third party providing information, or as a result of material, equipment or product failure.
- 2. The department may re-examine an approved material, equipment or product and issue a revised approval at any time.
- (f) The department may revoke an approval if the department determines that the material, equipment or product does not comply with this code or the intent of this code due to a change in the code or department interpretation of the code.
- (g) An approval issued by the department may not be construed as an assumption of any responsibility for defects in design, construction or performance of the approved material, equipment or product nor for any damages that may result.
- (h) Fees for the review of a material, equipment or product under this section and any onsite inspections shall be submitted in accordance with ch. Comm 2.
- (5) UNGRADED OR USED MATERIALS. (a) Ungraded or used building materials may be used or reused as long as the material possesses the essential properties necessary to achieve the level of performance required by the code for the intended use.
- (b) The department or the municipality enforcing this code may require tests in accordance with subs. (1) or (2).

### Materials

Basic material performance standards are set forth in the various chapters of the code. All alternate or new materials and new construction methods not covered by these standards may be submitted and reviewed by the Department of Commerce for use in one- and two-family dwellings. This may speed along the approval process for individual homes so that local inspectors do not need to review the acceptability of these alternate materials and methods. Local inspectors may also review alternate materials, for specific projects, to determine if they meet the adopted engineering standards of the UDC.

Manufacturers or distributors request 'Building Products Evaluations' from the department. A minimum fee of \$1000.00 per material or method evauationl number has been established by

the department, and shall accompany the application. The department will review all data, tests and claims of equivalent performance of the alternate material or method with respect to the health, welfare and safety performance standards of the code. Manufacturers or distributors may request a submittal information packet from our division.

In order to avoid duplicate submissions, materials evaluated under s. Comm 50.19 of the Wisconsin Building, Heating, Ventilating and Air Conditioning Code (Commercial Building Code) are normally acceptable under the UDC. This assumes that both codes regulate the material and construction requirement in a like manner. The materials approval letter should indicate other limitations which may apply.

Many materials approved under the Commercial Building Code are deemed acceptable under the UDC. A listing of these is in the appendix of the Commercial Building Code Commentary or available from the department. Manufacturers or distributors of reviewed materials should provide Department of Commerce material evaluation numbers when requested. If there are any questions as to the acceptability of a material for use in one- and two-family dwellings by a building inspector or manufacturer, please call the Department of Commerce.

#### Overview

This subchapter describes some of the UDC administrative law. It is worthwhile to briefly highlight the differences in the purposes of these administrative procedures as well as other associated UDC procedures:

# Engineered Design/Structural Analysis

This is a design that falls outside of the prescriptive or cookbook design tables and specifications of the UDC. A local inspector can accept them as long as the basic code requirements, such as design load requirements, are met. Typical acceptable engineering standards are listed in ss. 20.24 and 21.02. Local inspectors may request state review as in s. 20.09(5)(a) of this commentary.

### Material Approval

Manufacturers and distributors of alternative materials or methods often use this procedure. It can save time for all parties by substituting for the Engineered Design/Structural Design procedure where the material or design will be used repetitively in a number of dwellings.

### Individual Variance

If an applicant cannot conform to a specific code section and desires to provide equivalence to the code by other means, then a petition for variance must be submitted to the state.

### <u>Municipal Variance</u>

A municipality submits a variance request to the Department of Commerce when it believes that its climatic or soil conditions require a different application of the UDC for homes in its jurisdiction. Such a variance would apply to all homes in that municipality.

## Appeals-Overview

- <u>To Local Authorities</u> An appeal at the local level can only be on the basis of improper enforcement of the code as written. It cannot be to request a variance to a code requirement.
- <u>To State Authorities</u> An appeal to the state can be for one of the following reasons:
- An appeal of local enforcement;
- An appeal of the state's determination on an individual variance;
- An appeal of the state's determination on a municipal variance.

## Subchapter VII — Variances, Appeals, Violations and Penalties

### Comm 20.19 Petition for variance.

The department may grant a variance to a rule only if the variance does not result in lowering the level of health, safety and welfare established or intended by the rule. The department may consider other criteria in determining whether a variance should be granted including the effect of the variance on uniformity.

- (1) APPLICATION FOR VARIANCE. The applicant shall submit the petition for variance application to the municipality exercising jurisdiction in order to receive the municipal recommendation. Where no municipality exercises jurisdiction, the application shall be submitted to the department. The following items shall be submitted when requesting a variance:
- (a) A clear written statement of the specific provisions of this code from which a variance is requested and the method of establishing equivalency to those provisions.
- (b) A fee in accordance with s. Comm 2.52. The municipality may require a fee for the processing of the application in addition to the department's fee.

Note: A copy of the Petition for Variance Application form (SBD-8) is contained in the Appendix.

- (2) MUNICIPAL RECOMMENDATION. The municipality administering and enforcing this code shall submit all applications for variance to the department, together with a municipal recommendation within 10 business days after receipt of the application. The recommendation of the municipality shall include the following items:
  - (a) Inspections performed on the property.
  - (b) The issuance of correction orders on the property.

(c) An assessment of the overall impact of the variance on the municipality.

Note: A copy of the Municipal Recommendation form (SBD-6071) is contained in the Appendix.

- (3) DEPARTMENTAL ACTION. Where a municipality administers and enforces the code, the department shall decide petitions for variance and shall mail notification to the municipality and the applicant within 5 business days after receipt of the application and municipal recommendation. Where the department enforces the code, the department shall decide petitions for variance within 15 business days after receipt of the application and fees.
- (4) APPEALS. A person or municipality may appeal the determination of the department in the manner set out in s. 101.02 (6) (e) to (i) and (8), Stats.

# Individual Variance From a Specific Rule

It should be noted that only administrative code items may be petitioned for a variance. This means that if an item is required by the state statutes (which may be repeated in the administrative code), it may not be granted a variance. An example of this is smoke detectors.

An approvable variance application must demonstrate that the proposed design provides alternative measures that provide an equivalent degree of health, safety or welfare. Economic hardship, "it's not my fault," or "due to an error in construction" arguments themselves do not justify a variance.

Variances are processed by the state only for dwellings originally built since June 1, 1980. Variances for older dwellings, even though possibly subject to the UDC by local ordinances, are processed by the municipality.

Question: Answer: How does one go about applying for a variance to the Uniform Dwelling Code? All variance requests shall be submitted to the Department of Commerce via the enforcing municipality, if applicable. A complete submittal includes an Application Form (SBD-9890 (R. 11/2003)), including the Municipal Recommendation and the required fees per Comm 2.52(2) (currently \$125.00). A copy of relevant building plans, sketches, photographs, or other documents clarifying the statements on the application forms will be necessary in almost all cases. The municipality may also charge a variance processing fee.

### Comm 20.20 Municipal variance from the code.

Any municipality exercising or intending to exercise jurisdiction under this code may apply to the department for a variance permitting the municipality to adopt an ordinance not in conformance with this code. The department shall review and make a determination on a municipal request to adopt an ordinance not in conformance with this code within 60 business days of receipt of the request.

- (1) APPLICATION FOR VARIANCE. The department may grant an application only under the following circumstances:
- (a) The municipality has demonstrated that the variance is necessary to protect the health, safety or welfare of individuals within the municipality because of specific climate or soil conditions generally existing within the municipality.
- (b) The municipality has demonstrated that the granting of the variance, when viewed both individually and in conjunction with other variances requested by the municipality, does not impair the statewide uniformity of this code.
- (2) DEPARTMENTAL INQUIRY. Prior to making a determination, the department shall solicit within the municipality and consider the statements of any interested persons as to whether or not said application should be granted.
- (3) APPEALS. Any municipality aggrieved by the denial of an application may appeal the determination in accordance with the procedure set out in s. 101.02 (6) (e) to (i) and (8), Stats. The department shall review and make a determination on an appeal of denial of a municipal request to adopt an ordinance not in conformance with this code within 60 business days of receipt of the appeal.
- (4) UNIFORMITY. This section shall be strictly construed in accordance with the goal of promoting statewide uniformity.

## Comm 20.21 Appeals of orders, determinations, and for extension of time.

- (1) APPEALS OF ORDERS AND DETERMINATIONS BY A MUNICIPALITY EXERCISING JURISDICTION. Appeals of an order or determination of a municipality exercising jurisdiction under this code, including denials of application for permits, shall be made in accordance with the procedure set out in ch. 68, Stats., except as follows:
- (a) Appeals of final determinations by a municipality exercising jurisdiction. Appeals of final determination by municipalities shall be made to the department after the procedures prescribed in ch. 68, Stats., have been exhausted. All appeals to the department shall be in writing stating the reason for the appeal. All appeals shall be filed with the department within 10 business days of the date the final determination is rendered under ch. 68, Stats. The department shall render a written decision on all appeals within 60 business days of receipt of all calculations and documents necessary to complete the review.

Note: Chapter 68, Stats., provides that municipalities may adopt alternate administrative appeal procedures that provide the same due process rights as ch. 68, Stats. Municipalities having adopted such alternate procedures may follow those alternate procedures.

(2) APPEALS OF ORDERS AND DETERMINATIONS BY THE DEPARTMENT. Appeals of an order of the department made pursuant to the provisions of this code, including denials of application for permits, shall be in accordance with the procedure set out in s. 101.02 (6) (e) to (i) and (8), Stats. The department shall review and make a determination on an appeal

of an order or determination within 60 business days of receipt of all calculations and documents necessary to complete the review.

## Appeals of Orders and Determinations

Individuals (owners and/or builders) have the right to appeal any municipal or Department of Commerce order or determination. The procedures in appealing such orders or determinations are set forth in s. Comm 20.21. It should be noted that the administrative appeals process may not be used once an order has been referred to the responsible legal authorities (city attorney, district attorney, Attorney General).

Many times a building inspector's cited violations will be appealed to the local municipality following these procedures. Appeals of whether a particular code section applies to a particular situation may be decided locally.

The Department of Commerce welcomes enforcing municipalities to contact us to clarify code requirements at this point or even before writing orders. Generally it is <u>not</u> desirable to refer builders or designers to us directly regarding a specific project until the inspector first discusses it with department staff.

However, appeals that require granting of a variance to a specific UDC requirement cannot be approved by any municipality. All requests for a variance from the code must ultimately be submitted to the Department of Commerce for approval, conditional approval or denial (Comm 20.19). The Uniform Dwelling Code, in order to maintain statewide uniformity, did not extend to the building inspectors and/or municipalities the authority to deviate by local variance from specific code requirements on specific projects.

Since a municipality has the responsibility of making recommendations to the Department of Commerce on a variance, it is certainly appropriate that the variance be first directed to the local Inspection Department or Board of Appeals for comment.

(3) EXTENSIONS OF TIME. (a) The time for correction of cited orders as set out in s. Comm 20.10 shall automatically be extended in the event that an appeal of said orders is filed. The extension of time shall extend to the termination of the appeal procedure and for such additional time as the department or municipality administering and enforcing this code may allow

## Extensions of Time

Normally cited violations shall be corrected within 30 days after written notification in accordance with s. Comm 20.10(1)(c). However, municipalities may grant extensions of time for varying reasons.

- (b) The department or municipality administering and enforcing this code may grant additional reasonable time in which to comply with a violation order.
- (4) APPEALS OF SOIL EROSION CONTROL ORDERS BY A MUNICIPALITY FOR CESSATION OF WORK. (a) Appeals of orders for cessation of work issued under s. Comm 20.10 (1) (c) may be made to the authority issuing the cessation of work order. The authority shall make a determination on such appeal within 3 business days. Determination of appeals by a municipality may be conducted in consultation with the department.
- (b) Appeals of a final determination by a municipality on cessation of work orders may be made to the department. The department shall issue a final determination on the appeal within 3 business days after receipt of such appeal.
- (c) If the issuing authority determines the site to be compliant with s. Comm 21.125, orders shall be rescinded and work may commence.

#### Comm 20.22 Penalties and violations.

- (1) VIOLATIONS. No person shall construct or alter any dwelling in violation of any of the provisions of this code.
- (a) Injunction. When violations occur, the department may bring legal action to enjoin any violations.
- (b) Ordinances. This code shall not affect the enforcement of any ordinance or regulation, the violation of which occurred prior to the effective date of this code.
- (2) PENALTIES. Pursuant to ss. 101.66 and 101.77, Stats., whoever violates this code shall forfeit to the state not less than \$25 nor more than \$500 for each violation. Each day that the violation continues, after notice, shall constitute a separate offense.

### Penalties

It is not the intent of the department to set or receive penalties or forfeitures for violations of the code where municipalities are effectively administering and enforcing the Uniform Dwelling Code by establishing their own remedies and penalties. A municipality exercising jurisdiction should adopt ordinances for remedies and penalties for violations of this code.

(3) MUNICIPAL ENFORCEMENT. Any municipality which administers and enforces this code may provide, by ordinance, remedies and penalties for violation of that jurisdiction exercised under s. 101.65, Stats. These remedies and penalties shall be in addition to those which the state may impose under subs. (1) and (2).

### **Subchapter IX** — Adoption of Standards

## Comm 20.24 Adoption of standards.

- (1) CONSENT. Pursuant to s. 227.21 (2), Stats., the attorney general and the revisor of statutes have consented to the incorporation by reference of the standards listed in Tables 20.24-1 to 20.24-12.
- (2) ADOPTION OF STANDARDS. The standards referenced in Tables 20.24-1 to 20.24-12 are incorporated by reference into this chapter.

Note: Copies of the adopted standards are on file in the offices of the department, the secretary of state and the revisor of statutes. Copies of the standards may be purchased through the respective organizations listed in Tables 20.24-1 to 20.24-12.

- (3) ALTERNATE STANDARDS. (a) Alternate standards that are equivalent to or more stringent than the standards incorporated by reference in this chapter may be used in lieu of incorporated standards when approved by the department or if written approval is issued by the department in accordance with par. (b).
- (b) 1. a. Upon receipt of a fee and a written request, the department may issue an approval for the use of the alternate standard.
- b. The department shall review and make a determination on an application for approval within 40 business days of receipt of all forms, fees, and documents required to complete the review.
- 2. Determination of approval shall be based on an analysis of the alternate standard and the incorporated standard, prepared by a qualified independent third party or the organization that published the incorporated standard.
- 3. The department may include specific conditions in issuing an approval, including an expiration date for the approval. Violations of the conditions under which an approval is issued shall constitute a violation of this code.
- 4. If the department determines that the alternate standard is not equivalent to or more stringent than the standards incorporated by reference, the request for approval shall be denied in writing.
- 5. The department may revoke an approval for any false statements or misrepresentations of facts on which the approval was based. The department may re-examine an approved alternate standard and issue a revised approval at any time.
- 6. Fees for review of standards under this paragraph shall be submitted in accordance with ch. Comm 2.

# Adoption of Standards

All dwellings are required to be designed by the method of structural analysis or the method of accepted practice outlined in each chapter of the code. Dwellings designed by the method of structural analysis shall comply with the standards and manuals listed in this section. Other acceptable engineering standards are listed in s. Comm 21.02.

### **Table 20.24-1**

ACI	American Concrete Institute
	P.O. Box 9094
	Farmington Hills, MI 48333
Standard Reference Number	Title
1. 318-99	Building Code Requirements for Structural Concrete
2. 530-99	Building Code Requirements for Masonry Structures
3. 530.1-99	Specification for Masonry Structures

#### **Table 20.24-2**

AF&PA	American Forest & Paper Association 1111 19 <sup>th</sup> Street, N.W., Suite 800 Washington, D.C. 20036
Standard Reference Number	Title
1. NDS-2004	National Design Specification For Wood Construction
	Including 2004 Supplement
2. Technical Report # 7 January, 1987	The Permanent Wood Foundation System, Basic Requirements,
	except for section 3.3.1

### **Table 20.24-3**

AISC	American Institute of Steel Construction
	One E. Wacker Drive, Suite 3100
	Chicago, IL 60601
Standard Reference Number	Title
1. ASD	Specification For Structural Steel Buildings, Allowable Stress
	Design And Plastic Design, with Commentary, June 1, 1989

### **Table 20.24-4**

	- **** - * - * - * - * - * - * - * - *
	American Log Builders' Association
	PO Box 28608
	Bellingham, WA 98228
Standard Reference Number	Title
1996	Log Building Standards for Residential, Handcrafted,
	Interlocking, Scribe-fit Construction

### **Table 20.24-5**

ASTM	American Society for Testing and Materials
	1916 Race Street
	Philadelphia, PA 19103
Standard Reference Number	Title
1. C 62-01	Standard Specification For Building Brick (Solid Masonry Units
	Made From Clay Or Shale)
2. C 90-02	Standard Specification For Hollow Load-Bearing Concrete

	Masonry Units
3. C 216-02	Standard Specification For Facing Brick (Solid Masonry Units
	Made From Clay Or Shale)
4. C 270-01a	Standard Specification For Mortar For Unit Masonry
5. C 476-01	Standard Specification For Grout For Masonry
6. C 652-01a	Standard Specification For Hollow Brick (Hollow Masonry Units
	Made From Clay Or Shale)
7. D 225-01	Standard Specification For Asphalt Shingles (Organic Felt)
7. 2 <b>22</b> 0 VI	Surfaced With Mineral Granules
8. D 226-97a	Standard Specification For Asphalt-Saturated Organic Felt Used
0. D 220 )/u	In Roofing And Water Proofing
9. D 3462-02	Standard Specification For Asphalt Shingles Made From Glass
7. D 3402 02	Felt And Surfaced With Mineral Granules
10. D 4869-02	Standard Specification For Asphalt-Saturated Organic Felt
10. D 4009-02	Shingle Underlayment Used In Roofing
	Shingle Orderayment Osed in Rooming
	<b>Table 20.24-6</b>
ASHRAE	American Society of Heating, Refrigerating, and Air-conditionin
	Engineers, Inc.
	1791 Tullie Circle, N.E.
	Atlanta, GA 30329
Standard Reference Number	Title
1. 2004 Fundamentals	ASHRAE Handbook, Fundamentals
2. 1995 HVAC Applications	ASHRAE HVAC Applications Handbook
3. 1996 HVAC Systems & Equipment	ASHRAE HVAC Systems & Equipment Handbook
	Table 20.24-7
NAIMA	North American Insulation Manufacturers Association
	44 Canal Canter Plaza, Suite 310
	Alexandria, VA 22314
Standard Reference Number	Title
1. 3rd Edition, 1998	Fibrous Glass Duct Construction Standards
	T. 1.1. 40.4.4.0
NIED I	Table 20.24-8
NFPA	National Fire Protection Association
	1 Batterymarch Park
	Quincy, MA 02269
Standard Reference Number	Title
1. NFPA 54-1999, chapters 1 to 4	National Fuel Gas Code
	<b>Table 20.24-9</b>
NIST	National Institute of Standards and Technology
NIST	<u> </u>
	U.S. Department of Commerce
	Washington, D.C. 20234  Title
Standard Reference Number	

**Table 20.24-10** 

Of Manufactured Buildings

Des Plaines, IL 60018

1. NBS Building Science Series 87, July 1976

NWWDA

Model Documents for the Evaluation, Approval, and Inspection

National Wood Window and Door Association

1400 East Touhy Avenue, Suite 470

Standard Reference Number	Title
1. AAMA/NWWDA 101/I.S.2-97	Voluntary Specifications for Aluminum, Vinyl (PVC) and Wood
	Windows and Glass Doors

## **Table 20.24-11**

	**** * **
SMACNA	Sheet Metal and Air Conditioning Contractors National
	Association
	Vienna, VA 22180
Standard Reference Number	Title
1. Seventh Edition, 1998	Residential Comfort System Installation Standards Manual
2. Second Edition, 1995, Including Addendum	HVAC Duct Construction Standards – Metal And Flexible
No. 1, November 1997	
3. Sixth Edition, 1992	Fibrous Glass Duct Construction Standards

## **Table 20.24-12**

TPI	Truss Plate Institute, Inc.
	583 D'Onofrio Drive
	Madison, WI 53719
Standard Reference Number	Title
1. ANSI/TPI 1-1995	National Design Standard for Metal Plate Connected Wood Truss
	Construction